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ABSTRACT

In highlighting findings from five separate studies on the characteristics of public school personnel in Minnesota, this study seeks to assist legislators, public agency staffs, school board members, and administrators in gaining a better understanding of the educator labor force as they engage in policy development and planning for the decade ahead. The report includes statistics on age, sex, training, experience, salaries, and mobility of educators as well as findings on unemployment insurance costs and the characteristics of newly hired staff. The effects of declining enrollment on voluntary and involuntary geographic mobility are also discussed. (Author/WD)

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Public School Educators in Minnesota

Final Report

state planning agency
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INTRODUCTION

Women are having fewer children, people are living longer and the baby boom generation is moving into adulthood. All of these occurrences have an impact on public schools and in turn affect school employees.

In Minnesota's elementary and secondary schools, enrollments peaked in 1971-72. Elementary school enrollments have been declining ever since. Declines in secondary school enrollments began in 1976-77. By 1983, Minnesota's school enrollments will have declined by 22 percent or 205,000 students since 1970. School age population at the secondary school level in 1990 is estimated to be only 71 percent of the 1975 level.

Public education is financially dependent on state aids. State financial aids are related to "weighted pupils" (1.0 for an elementary pupil, 1.4 per secondary pupil) rather than actual numbers of students. Therefore, the newly declining secondary enrollments will create a sharper fall-off in total pupil units serviced by schools and also the amount of state financial aid coming to those schools.

Education is highly labor intensive. It depends on people, most of them professionals, to perform its functions. Although school district expenditures for salaries have increased at a slower rate than expenditures for other items since 1969, they nevertheless accounted for 73 percent of total expenditures by local school districts in 1975-76.[1]

All of this has a profound effect on persons employed in Minnesota's public schools. If staff were reduced proportionately to the loss of students, over 11,000 staff positions would be eliminated between 1975 and 1985, assuming the 1975 state average student staff ratio of 17.5:1 (students per total FTE professional staff).[2] While this is not happening, a number of professional staff in public schools will lose their jobs due to declining enrollments and rising costs.

In the fall of 1977, the Governor and members of the Legislature requested the State Planning Agency[3] to take responsibility for designing and coordinating a study of public school personnel in Minnesota. A series of five separate studies, each treating a separate topic, has already been issued. This report summarizes the findings of those individual studies and discusses their implications.

The impetus for these studies came largely from concern about an oversupply of school staff. However, as research progressed, indicators pointed to potential shortages of available personnel in particular subject areas or geographic locations. While this report does not deal specifically with the problems of supply and demand, it is designed to provide information on the characteristics of school personnel.

The intent of this document, then, is to assist legislators, legislative and public agency staff, and school board members and administrators in gaining a better understanding of the educator labor force in order to aid them in policy development and planning for the decade ahead.

Chapter Footnotes

[1] The Condition of Education, Minnesota State Planning Agency, 1977.

[2] Minnesota Advisory Council on Fluctuating School Enrollments, 1977, Final Report

[3] The Minnesota State Planning Agency has been concerned with the areas of school finance and changing enrollments and has published:

- A series of school finance policy studies (Minnesota School Finance Policy Studies, 1976-1977)
- A manual to assist local school districts in planning for and adjusting to declining enrollments (Planning for Declining Enrollments: Planning Assistance Manual and Case Studies, 1976)
- A report describing education in Minnesota (The Condition of Education: Facts About Minnesota's Public Schools, 1977)
- A study of teacher reductions (Preliminary Study of Teacher Supply and Demand: Teacher Reductions, 1977)

EXECUTIVE SUMMARY OF MAJOR FINDINGS

Characteristics of the Education Cadre 1973-74 to 1977-78

AGE: There are fewer young and fewer old persons among education professionals. However, the proportion of middle-aged staff is increasing. This trend is especially evident in the Twin Cities metropolitan area. (p. 14)

a) In 1977-78, 22 percent of FTE staff were between the ages of 20 and 29; in 1973-74, 32 percent fit that classification.

b) In 1977-78, 48 percent of all public school educators were between the ages of 30 and 44, compared with 40 percent in 1973-74.

c) In 1977-78, 10 percent of all FTE staff were older than age 54, down from 12 percent in 1973-74.

SEX: Men continue to dominate administrative assignments. In addition, there has been a slight overall increase in the proportion of males in the total education cadre. (p. 15)

a) In 1977-78, men comprised:
- 99 percent of all superintendents
- 97 percent of all secondary principals
- 89 percent of all elementary principals
- 81 percent of all Special Education directors

b) In 1977-78, most elementary teachers were female (78 percent), while most secondary teachers were male (67 percent).

TRAINING: Public school educators are increasingly highly trained, particularly in the Twin Cities metropolitan area and Duluth. (p. 16)

a) In 1977-78, 28 percent of all FTE staff held Master's degrees or more, up from 24 percent in 1973-74.

b) In Minneapolis, St. Paul and Duluth, 38.5 percent of all staff had earned Master's degrees or more in 1977-78, compared with 14 percent of staff in small districts outside the Twin Cities Metropolitan area.

EXPERIENCE: The proportion of professional public school personnel with more than 10 years of education experience has increased. While this trend is more pronounced in large school districts, it is reversed in small districts. (p. 16)

a) In 1977-78, 52 percent of all educators in Minnesota had logged more than ten years of employment in education, compared with 44 percent in 1973-74.

b) In 1977-78, 62 percent of all professional staff in Minneapolis, St. Paul and Duluth had more than ten years of experience, up from 51 percent in 1973-74.

c) In 1977-78, 65 percent of all professional employees (983 FTE staff) in districts enrolling fewer than 300 students had 10 or fewer years of experience. This represents an increase from 1973-74, when 59 percent of all professional personnel (487 FTE staff) displayed this characteristic.

SALARIES: Salaries of professional staff have increased by approximately one-third since 1973-74. While expenditures for salaries have not increased as rapidly as non-salary expenditures, they continue to comprise the major expense for school districts. (p. 17)

a) In 1973-74, the average salary earned by professional staff was $11,388; by 1977-78, it had increased to $15,155.

b) Annualized salaries show an increase from $15,358 in 1973-74 to $20,651 in 1977-78.

c) Although the percentage of dollar increase in staff salaries is consistent throughout all school districts, actual dollar amounts vary by district size and geographic location.

ASSIGNMENTS: The five-year period 1973-74 to 1977-78 exhibits a pattern of overall growth followed by the beginning of rapid decline in the ranks of public school educators in Minnesota. With the exception of Special Education, all professional assignment areas exhibited declines in FTE staff in 1977-78. (p. 17).

a) The education cadre grew from 50,720 staff in 1973-74 to a peak of 51,528 staff in 1975-76. Thereafter, shrinkage began to occur, with the

FTE staff of 50,640 in 1977-78 marking the first year of decline below the 1973-74 level.

b) The year 1977-78 is particularly significant in that it is the first time Minnesota experienced an overall net decline within a one-year span in the total number of FTE staff (-1.4% or 707 FTE staff).

c) The number of FTE staff positions in Special Education has increased 60 percent since 1973-74, or from 2,994 FTE staff in 1973-74 to 4,796 in 1977-78.

d) School district staffing patterns are affected differentially by enrollment changes.

TERMINATIONS: The balance of voluntary to involuntary staff terminations is shifting, despite an increase in the number of persons voluntarily leaving education for other employment. This is primarily due to staff reductions (i.e., terminations of staff due to budget and enrollment considerations). (p. 19)

a) In 1976-77, voluntary terminations outweighed involuntary terminations by 326 persons (7%). In 1977-78, the difference was much less significant: 9 persons (2%).

b) Although total voluntary terminations have decreased since 1976-77, 829 persons (18.5% of all voluntary terminations) left education for other employment in 1977-78, an increase over the previous year of 158 persons.

c) At the end of the 1976-77 school year, 664 professional staff were placed on unrequested leave and not rehired in the same school district for the 1977-78 school year. In 1975-76, 265 persons were affected.

d) Of these 664 persons, 155 or 23.6 percent were hired in other districts. This resulted in a net displacement of 501 professional staff in 1977-78, or approximately 1 percent of the total cadre.

e) Those persons terminated due to staff reductions in 1977-78 were younger and had less experience in education than those who voluntarily left for other employment.

f) School districts in 11 of the 13 development regions displayed a relative balance between the number of staff voluntarily leaving for other employment and those terminated due to staff reductions.

g) However, layoffs in Region 10 (Southeast) and 11 (Metro) accounted for 64 percent (420 persons) of the total statewide staff reductions in 1977-78.

h) In the Twin Cities area, school districts were affected differentially by staff reductions, with five suburban districts (Robbinsdale, Hopkins, Bloomington, St. Louis Park, and Richfield; accounting for 65 percent of the 317 metro layoffs.

Unemployment Insurance Costs
1977

Unemployment Compensation Under the Law

As political subdivisions, local school districts are included under the provisions of the Minnesota Employment Services Law of 1974 and therefore covered for unemployment insurance. Hence, all personnel who work for public schools are part of covered employment. School employees are permitted to use wage credits earned in a local district to file for unemployment insurance between school terms if they have not received "reasonable assurance" of employment in the successive academic year. Local districts reimburse the Minnesota Department of Economic Security for payments made to terminated employees from earmarked dollars in the local tax levy. (p.23)

Claimant Group I: Professional Staff Who Were Laid Off in the Spring of 1977 and Were not Rehired in the Same District by October, 1977

NUMBER OF RECIPIENTS: Of the total 651 terminated professional staff, 355 (54.5%) received unemployment insurance. (p. 24)

a. Seventy-six percent of all recipients lived in Development Regions 3, 10 and 11; these same regions reported 73 percent of all staff terminations.

b. While variations exist, at least 22 percent of all terminated staff in any given Development Region received unemployment insurance.

AMOUNTS RECEIVED AND DURATION OF PAYMENTS: A total of $647,797 was paid in benefits to claimants in this group. (p. 25)

a. The average total amount received by an individual was $1,824.78.
b. The average duration of payments was 17.7 weeks.

CHARACTERISTICS OF RECIPIENTS: The majority of persons who received unemployment insurance were: female (68%); aged 20-29 (63%); and holders of a Bachelor's degree only (70%). This profile is consistent with that for all terminated professional staff. (p. 26)

a. The duration of unemployment increased with age: persons aged 20-24 were jobless an average of 13.8 weeks, while those 55-59 were unemployed an average of 27.2 weeks.
b. Recipients with 19 or more years of education were unemployed less time (15.3 weeks) than those with fewer years of education (18.2 weeks).
c. Women had a longer duration of unemployment (19.5 weeks) than men (13.8 weeks).

REEMPLOYMENT PATTERNS OF RECIPIENTS: Of all recipients, 63.7 percent had found work by the last week of April, 1978. A higher proportion of persons in the Twin Cities Metropolitan area (Region 11) were successful in their job search than were those outside the metro area (45%). (p. 28)

Claimant Group II: Professional Staff Who Were Laid Off in the Spring of 1977 and Who Found Work in Another Minnesota School District by October, 1977

NUMBER OF RECIPIENTS AND AMOUNTS RECEIVED: Of the total 155 professional staff hired in another district, 69 persons (44.5%) received a total of $65,294 in unemployment insurance benefits. (p. 28)

a. The average duration of benefits for this group of claimants was shorter than that for persons who did not find work in a Minnesota school district (Claimant Group I): 8.8 weeks compared with 17.7 weeks.
b. Recipients received an average of $946.29 in benefits, compared with $1,824.78 for persons in Claimant Group I.

Claimant Group III: Professional Staff Who Were Terminated in the Spring of 1977 By Districts in the Twin Cities Metropolitan Area, Rochester and Duluth and Who Were Reemployed in the Same District by October, 1977

STAFF LAYOFFS AND REEMPLOYMENT: In all, 1,475 professional staff were laid off in the spring of 1977; 832 (56%) were rehired by the following October. However, variations among the school districts studied were apparent. (p. 29)

NUMBER OF RECIPIENTS: Persons who were rehired in the same district accounted for 50.4 percent of all unemployment insurance recipients during the summer of 1977. (p. 29)

a. Of the total 1,475 professional staff who were terminated, 534 persons (36%) collected benefits.
b. Of the 832 persons who were rehired, 269 (32%) collected unemployment insurance.
c. These 269 persons represented 50.4 percent of all recipients.

RECIPIENTS BY SCHOOL DISTRICT: Although 30 of the 51 districts (67%) incurred unemployment insurance costs for professional staff, only 20 made payments to persons who were rehired. (p. 30)

a. Sixteen districts laid off no professional staff. These included Minneapolis, Rosemount and Eden Prairie.
b. Five districts terminated professional staff but had no unemployment insurance claims filed against them. Minnetonka and Mahtomedi are included in this group.
c. Ten districts incurred unemployment insurance costs only for professional staff who were not rehired. Golden Valley, Richfield, Roseville and Wayzata belong to this group.
d. Twenty districts paid unemployment insurance to professional staff who were rehired as well as to

those who were not reemployed. Recipients who were rehired by fall represented 54 percent of all persons who received benefits during the summer of 1977. Districts in this group included Robbinsdale, St. Louis Park, Hopkins, and St. Paul.

AMOUNTS PAID BY SCHOOL DISTRICTS: Payments to reemployed staff totalled $273,264 or 45 percent of all unemployment insurance received by professional staff. (p. 31)

a. Claims were filed against 20 of the 51 districts under study by staff who were subsequently reemployed.

b. In these 20 districts, 49.9 percent of all unemployment insurance payments to professional staff were made to persons who were rehired by fall.

c. Amounts in excess of $10,000 were incurred for reemployed staff in seven districts; Duluth, Robbinsdale and St. Paul showed costs in excess of $47,000.

d. On the average, a professional staff person who was terminated and reemployed collected $1,016 in unemployment insurance benefits.

Summary Comments

Unemployment insurance is intended to protect workers who qualify against uncertainties of irregular income. The findings of this study indicate that the behavior of public school employees who are laid off in using wage credits to file claims against their former employers is consistent with the provisions of the Employment Services Law. However, two recent changes in state law should enable school districts to better manage the difficult and sensitive areas of staff layoffs and recall and thereby reduce the amount of money expended for unemployment insurance. These legislative revisions are:

1. The extension in 1977 of the deadline for staff notification of involuntary terminations and unrequested leave to June 1 (from April 1). This enables districts to better anticipate their revenues, enrollments and staffing needs.
2. The 1978 modification of the Minnesota Employment Services Law to define "reasonable assurance" of employment as an implied, verbal, or written agreement between the school district and an individual rather than a signed contract only.

Information concerning the three distinct groups of claimants is summarized below:

SUMMARY TABLE

Unemployment Insurance Activity	Claimant Group 1 Recipients Laid Off* & Not Rehired In Any District (of 496 persons)	Claimant Group 2 Recipients Laid Off* From One District & Rehired by Another (of 155 persons)	Claimant Group 3 Recipients Laid Off** & Rehired In The Same District (of 832 persons)
Individuals (percent of eligible pool)	286 (58%)	69 (45%)	629 (32%)
Total Amount Paid	$582,503	$65,294	$273,264

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* Statewide
** Region 11, Duluth and Rochester only

Employment Status Changes of Educators Voluntarily Leaving Education or Terminated Due to Involuntary Staff Reductions, 1977

Demographic Variables

SEX: A person who voluntarily left education for other employment in 1977 was likely to be male, while an educator terminated due to staff reductions was likely to be female. (p. 34)

a. Seventy percent of all respondents who voluntarily left education for other employment were male.
b. Seventy-three percent of all respondents terminated due to staff reductions were female.

WAGE EARNER STATUS: Most respondents (83%) who voluntarily left education for other employment were primary wage earners. In contrast, respondents displaced due to staff reductions were evenly divided between primary and supplementary wage earners. (p. 35)

MARITAL STATUS, AGE, TRAINING: Most respondents were married and averaged 32.5 years of age; a majority had not earned post-baccalaureate degrees. (p. 35)

Past Employment Variables

JOB EXPERIENCE IN EDUCATION: Respondents who left education voluntarily had more accumulated experience in education than those who were terminated due to staff reductions. (p. 35)

a. Respondents leaving voluntarily had spent an average of 4.96 years in education jobs.
b. Respondents affected by staff reductions had logged an average of 3.23 years in education jobs.

EDUCATION ASSIGNMENT AREA: A majority (78 percent) of persons leaving education voluntarily came from secondary instructional positions, while the assignments of respondents in the staff reduction group were more evenly distributed. (p. 35)

PAST JOB MARKET EXPERIENCE: Respondents who left education voluntarily had held twice as many jobs outside education as within education. Therefore, past job change involving movement from one field to another was predictive of continuing occupational mobility for the groups studied. (p. 36)

Employment Status Change Variables

EMPLOYMENT STATUS AS OF JULY 1, 1978: By July 1, 1978 (one year after termination), 94 percent of all respondents looking for work were employed. However, more educators who left the profession voluntarily were employed in full-time work by this date than were respondents in the staff reduction group. (p. 36)

DURATION OF JOB SEARCH: Respondents who voluntarily left the profession obtained employment in less time than did those affected by staff reductions. (p. 36)

a. The time spent jobless averaged 1.6 months for the voluntary quit group and 3.6 months for respondents terminated involuntarily.
b. Although 90 percent of respondents in the voluntary quit group found work within 4 months of termination, the same employment level for other respondents was not reached until 8 months had elapsed.

SALARY COMPARISONS: Respondents who voluntarily left education were able to find better-paying jobs than respondents terminated due to staff reductions. (p. 36)

a. Fifty-one percent of respondents in the voluntary quit group reported annual salary increases of $500 to $4,500.

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b. Fifty-five percent of respondents in the staff reduction group were earning $500 to $4,500 less in their new positions.

TYPE OF JOB OBTAINED: Respondents who left education voluntarily displayed versatility in their occupational moves, while the job titles of respondents in the staff reduction group indicate underemployment. (p. 36)

a. Sixty-six percent of respondents leaving education voluntarily found non-teaching professional, managerial, or sales jobs; 6 percent stayed in teaching.

b. In contrast, 46 percent of respondents in the staff reduction group stayed in teaching (many part-time), while 15 percent were employed in clerical jobs. Only 30 percent found non-teaching jobs in professional, management or sales areas.

JOB SATISFACTION: A higher proportion of respondents who left education voluntarily reported that they were more pleased with their new jobs than with their former positions, as compared with the responses of other respondents. (p. 37)

a. Seventy-seven percent of respondents in the voluntary quit group reported that they liked their current job better than their former position.

COMMITMENT TO PUBLIC SCHOOL EDUCATION AS A PROFESSION: A majority (66%) of respondents in the voluntary quit group would not return to public school jobs if given the opportunity, while 67% of respondents in the staff reduction group reported a desire to re-enter public school education. (p 37)

SUMMARY COMMENTS

The number of professional staff leaving education for other employment is increasing. In 1973-74, 604 persons changed occupations, accounting for 12 percent of all terminations that year. By 1978-79, 966 persons left education for other jobs, representing 22 percent of total staff terminations. In fact, these voluntary quits for career change significantly outnumber involuntary terminations due to staff reductions. School personnel administrators report increasing use of long-term leaves of absence for retraining and career exploration, particularly by men in their thirties. The findings of this report reveal that job changers in 1977 were indeed men in their thirties. Whether these data signal an outmigration of highly-motivated "self-starters" is an issue which cannot be addressed with the data currently available.

This study indicates that successful job moves were made by many former educators. However, the underemployment of the women who were displaced from public schools in 1977 is cause for concern. Reasons for protracted joblessness and underemployment include educators' unwillingness to accept potential job loss, unfamiliarity with the world of work outside education, lack of awareness of their marketable skills, and the economic protection afforded by unemployment insurance. For these reasons, special efforts to assist displaced educators find new employment, such as the "Job Change Services for Unemployed Educators" project, may be warranted.

Cash savings to local districts accrue when high-salaried staff leave their positions and are replaced with lower-cost staff (or in some cases, not replaced at all). On the other hand, district costs for unemployment insurance escalate annually. They will be driven by the number of layoffs as well as by the duration of joblessness of former employees. These economic concerns do not address issues arising from changes in staff characteristics and quality. Therefore, careful monitoring of the trends in the education cadre identified in this series of staff studies should be important in future policy considerations.

Characteristics of Newly Hired Staff, 1973-74 to 1977-78

ASSIGNMENT: The five year period 1973-74 to 1977-78 exhibits a pattern of growth followed by shrinkage in the number of newly hired public school personnel in Minnesota. With the exception of Special Education and Unclassified Administrators (e.g., business managers and personnel officers), all assignment areas manifested declines in the number of new FTE staff. (p. 41)

a. The total number of new FTE staff grew slightly from 4,968 in 1973-74 to a peak of 5,020 in 1975-76. Thereafter, shrinkage began to occur.

b. In 1977-78, 4,698 new FTE staff were hired. This represented a 5.4 percent decline in the total number of FTE staff since 1973-74.

c. Due to shrinkage in the cadre as a whole, the overall proportion of newly hired to total FTE staff has remained constant at somewhat over 9 percent in the five-year period.

d. However, if Special Education is removed, the proportion of the total cadre represented by newly hired personnel exhibits a gradual but steady decline of 1.2 percent between 1973-74 and 1977-78 (from 9.2% to 8.0%).

e. The proportion of newly-hired to total FTE staff has decreased most sharply in secondary instructional assignment areas (from 10.6% in 1973-74 to 8.9% in 1977-78).

f. The proportion of newly hired to total FTE staff has increased 1.3 percent in Special Education, or from 19.9 percent in 1973-74 to 21.2 percent in 1977-78.

g. School districts of different sizes vary in their hiring patterns, with smaller districts reflecting the greatest proportion of newly hired to total FTE staff.

h. The proportion of newly hired FTE personnel in part-time assignments increased from 4.9 percent (245 FTE staff) in 1973-74 to 7.6 percent (359 FTE staff) in 1977-78.

SOURCE OF NEW STAFF: The number of newly hired professional staff who have prior job experience in education has increased substantially since 1973-74. (p. 42)

a. In 1977-78, 55 percent of all new staff had previous job experience in education compared with 38 percent in 1973-74.

b. The number of persons transferring from one Minnesota school district to another has increased from 969 in 1973-74 (21%) to 1,462 in 1977-78 (31%).

c. In the five-year period, a 76 percent increase has occurred in the number of experienced personnel who are returning to the education profession after an absence of one year or longer.

d. In 1977-78, 45 percent of all new staff were employed for the first time in public schools, down from 62 percent in 1973-74.

AGE: Fewer young persons are being hired in Minnesota school districts. However, the proportion of staff over age 25 is increasing. This trend is especially evident in the Twin Cities metropolitan area. (p. 44)

a. In 1977-78, 25 percent of all new staff were 24 years of age or younger, compared with 43 percent in 1973-74.

b. Growth over the five-year period has occurred in all other age categories. In 1977-78:
   — 42 percent of all new staff were ages 25-29 (up from 34% in 1973-74)
   — 29 percent of all new staff were ages 30-44 (up from 20% in 1973-74)
   — 5 percent of all new staff were over age 45 (up from 3.8% in 1973-74).

c. In the Twin Cities metropolitan area, 18 percent of all new staff were younger than age 24 in 1977-78, compared with 30 percent in non-metro districts.

SEX: Increasingly, more women than men are being hired by Minnesota school districts. This trend becomes more pronounced when new staff in full-time and part-time positions are compared. (p. 45)

a. In 1977-78, 67 percent of all new staff were women, compared with 57 percent in 1973-74.

b. In 1977-78, 80 percent of the persons hired in part-time positions were women.

TRAINING: Although a modest increase has occurred in the proportion of newly hired staff who have advanced training, over 80 percent have not earned post-Baccalaureate degrees. (p. 46)

EXPERIENCE: Although increases in new staff with 11 or more years of experience have occurred, over 90 percent of newly hired persons in 1977-78 had been employed in public schools fewer than ten years. (p. 46)

Profile of the Geographically Mobile Educator

Demographic Variables

AGE: Educators who were geographically mobile in 1977 tended to be younger than those who did not change school districts. (p. 51)

a. The average age of mobile educators in the sample population was 30 years.
b. The mean age of non-mobile respondents was 39.3 years.

SEX: Sixty-three percent of all women respondents were mobile, compared with 55 percent of all men. (p. 52)

MARITAL STATUS: Single and divorced status proved to be predictive of geographic mobility in the sample population, although 76 percent of all respondents were married. (p 52)

WAGE EARNER STATUS: A majority of married respondents (79%) indicated that their spouses were employed, and that they considered their wages to be of supplementary or equal importance to those of their mate. However, more mobile than non-mobile respondents viewed their wages as supplementary or equal to those of a spouse. (p. 52)

TYPE AND LENGTH OF RESIDENCE: Mobile respondents tended to have made fewer capital investments in their communities than those persons in the non-mobile group. (p. 52)

a. The average length of residence in the 1976-77 community was 2.5 years for mobile respondents and 8.7 years for non-mobile respondents.
b. A higher percentage of non-mobile respondents were homeowners, while mobile staff were more likely to rent or live with others.

RESIDENTIAL CHANGE: A majority of mobile respondents (60%) did not change their county of residence, despite their career moves. (p. 53)

Education and Employment Variables

LENGTH OF SERVICE: Respondents with fewer years invested in public education employment were more likely to be geographically mobile. (p. 53)

a. Mobile respondents had logged an average of 6.3 years of employment experience in public education, compared with 13.2 years for non-mobile respondents.
b. Mobile educators had worked an average of 3.0 years in their 1976-77 school district, while persons in the non-mobile group reported a mean of 9.4 years.

TOTAL NUMBER OF JOBS: No significant difference was found between the mobile and non-mobile groups on this variable. This finding contrasts with State Planning Agency research on educators voluntarily leaving education for other employment which revealed career changers to have a high level of past occupational mobility. (p. 53)

SUPPLEMENTARY EMPLOYMENT: Although no significant differences were found between mobile and non-mobile staff on this variable, one-third of all respondents reported holding a second job. In addition, 31 percent indicated that the opportunity for supplemental employment would be an important consideration in changing school districts. (p. 53)

EDUCATIONAL BACKGROUND: As consistent with other research conducted on teacher mobility, academic degree held was found to have little influence on migration in the sample population. (p. 53)

Professional Change and Job Search Behavior: Mobile Educators

PART-TIME/FULL-TIME STATUS: Mobile respondents were more likely than non-mobile respondents to be employed part-time by school districts during 1976-77. A

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number of these part-time staff reported moving into full-time positions as a result of migration. (p. 54)

JOB LEVEL AND ASSIGNMENT: Analysis of job levels and assignments revealed the movement of respondents into supervisory and special education areas. These findings support the notion of vertical career mobility and reflect the continuing market demand for educators with specialized skills. (p. 54)

JOB SEARCH BEHAVIOR: Respondents who voluntarily changed districts effected a transfer more easily than did mobile respondents involuntarily terminated due to staff reductions. Half of all mobile respondents indicated that they expected to change school districts in the near future. (p. 54)

COMMUTING BEHAVIOR AND PREFERENCES: Although voluntarily mobile educators reported an actual decrease in their commuting time to work, they indicated greater willingness to lengthen their travel time than did non-mobile respondents. In addition, significantly more non-mobile than mobile respondents lived and worked in the same school district. (p. 54)

Location Preferences, Incentives and Disincentives to Mobility, and Perceptions of Declining Enrollments

Location Preferences

REGIONAL PREFERENCES: Mobile educators were likely to both prefer and migrate to a geographic region in Minnesota projected to experience population growth. This would indicate that mobile staff tend to be more attuned to demographic trends than educators who are not mobile. (p. 55)

SCHOOL DISTRICT TYPE: Respondents' attitudes concerning both the most and least attractive work situations were strongly held. (p. 56)

a. Eighty-two percent of all respondents indicated that they would find employment in school districts in the suburbs or medium cities/towns the most attractive.

b. A majority of respondents viewed inner city (72%) and rural small town (19%) work situations as the least attractive.

c. Fifty-five percent of respondents would change positions to their preferred locale if they were given a salary increase of $1000 or more.

d. Negative feelings were strongly held: 58 percent of all respondents replied that salary increase of more than $10,000 would be required to induce them to move to their least preferred locale.

Mobility Incentives

POLICY MANIPULABLE FACTORS: Non-mobile respondents tended to view incentive factors which are amenable to public policy manipulation as very important in decision making about a new job. These factors, which were less important to mobile respondents, were: starting salary, salary step, transfer of retirement and service credits, vacation and sick leave benefits, number of work weeks, and tenure rights. (p. 58)

BACKGROUND FACTORS: Mobile respondents were more likely to place a high value on incentive factors which are not amenable to direct public policy manipulation. Factors which received high ratings included: job opportunities for a spouse, opportunities for further education, recreational opportunities, and proximity of relatives and friends. (p. 58)

Inhibiting Factors to Mobility (p. 59)

- The four most important factors valued by respondents in their current jobs were starting salary, commuting distance, spouse's job responsibilities, and co-workers.
- Salary factors tended to be more important to non-mobile respondents.

- **Commuting distance and spouse's job responsibilities were ranked higher by mobile respondents.**

Major Employment Alternatives

Over half of all respondents reported that they would first prefer to commute to an adjacent school district if they were faced with a job loss. If faced with a migration decision, however, a substantial number of respondents reported that they would prefer to take a job outside of education in lieu of leaving their community. (p. 59)

Perceptions of Enrollment Fluctuations

Respondents tended to base their perceptions of changes in school enrollments on their personal experiences at the local school district level rather than on actual demographic trends. (p. 60)

a. Mobile educators were more likely to view enrollments in their districts as increasing or remaining steady.

b. Non-mobile staff tended to view enrollments in their school districts as declining.

Summary Comments

Economic incentives are frequently viewed as the most viable option for addressing geographic mismatches of supply and demand. However, the evidence presented in this study suggests that financial factors alone are not of primary importance in an individual's migration decision. Rather, a broad range of demographic and community characteristics appear to have a strong impact on a determination to relocate. Policy makers have control over a limited number of these mobility incentive factors. Indeed, findings would indicate that the "push" out of a school district tends to be based on the demographic characteristics of an individual, while the "pull" to a different district is strongly influenced by community and economic background factors. The complex interactions between current contract provisions and legislative initiatives could not have been anticipated by policy makers. However, these interrelationships will need to be addressed in order to arrive at the mix of instruments which will best ensure an optimal distribution of educators across school districts in Minnesota.

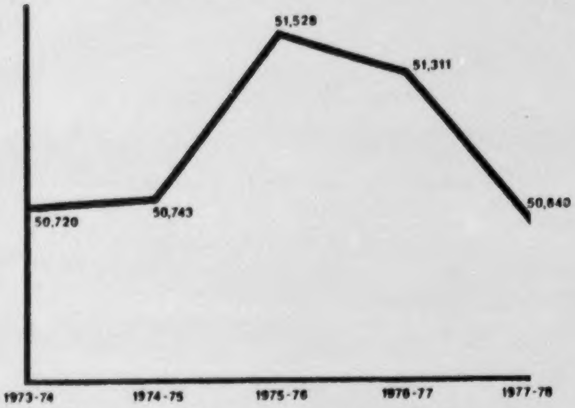
MAJOR FINDINGS ON THE CHARACTERISTICS OF THE EDUCATION CADRE

This study summarizes the changes during the period 1973-74 to 1977-78 for these staff characteristics: age, sex, training, experience, salary and assignment. Analysis is based on data collected by the Minnesota Department of Education.

Overview

The five-year period 1973-74 to 1977-78 exhibits a pattern of overall growth followed by the beginning of rapid decline in the ranks of professional public school educators in Minnesota.

EXHIBIT 1
TOTAL FTE PROFESSIONAL STAFF,
1973-74 TO 1977-78



As Exhibit One depicts, the educator cadre grew from 50,720 FTE staff in 1973-74 to a peak of 51,528 staff in 1975-76. Thereafter, shrinkage began to occur, with 50,640 FTE staff in 1977-78 marking the first year of decline below the 1973-74 level. The decline between 1976-77 and 1977-78 was the most precipitous, accounting for a loss of 707.73 FTE staff (-1.4%). Table 1 summarizes these changes.

Although a later section in this chaper will examine staffing trends by assignment and type of school district, it is nonetheless interesting to note that declines have affected all types of positions **except** those in Special Education. Table 2 illustrates the changes from 1976-77 to 1977-78 in four representative categories.

In the one year period, 1976-77 to 1977-78, four important phenomena occurred:

1. An overall decrease of 1.4 percent in the total number of FTE staff. A loss of 707 staff indicated movement from a balanced situation in 1976-77 between newly hired staff and terminations to the first year of actual decline.

TABLE 1
CHANGE IN TOTAL FTE PROFESSIONAL STAFF 1973-74 TO 1977-78

Year	FTE Total	FTE Change	% of Change
1973-74	50,720.79	—	—
1974-75	50,743.57	+ 22.78	+0.04%
1975-76	51,528.83	+785.26	+1.5%
1976-77	51,347.73	−181.10	−0.35%
1977-78	50,640.00	−707.73	−1.4%

TABLE 2
CHANGE IN SELECTED FTE STAFF POSITIONS 1976-77 TO 1977-78

ASSIGNMENT	1976-77	1977-78	FTE CHANGE	% OF CHANGE
Kindergarten	1,293.9	1,216.8	- 77.0	-5.9%
Regular Elementary Instruction	14,899.5	14,723.7	175.8	-1.2%
Secondary Instructional	22,210.7	21,452.8	-757.8	-3.4%
Special Education	4,376.1	4,796.2	+420.1	+9.6%
TOTAL	51,347.7	50,640.0	-707.73	-1.4%

2. A drop in the number of FTE positions is made even more dramatic when Special Education is excluded. In regular classroom teaching positions, a loss of 922 FTE staff has occurred since 1976-77.[1]
3. The singular and continued growth of Special Education which resulted in the addition of 420 FTE positions, an increase of 9.6 percent.
4. The first significant declines in secondary classroom teaching positions, (-3.4%), accompanied by a levelling off in the number of teaching positions at the elementary level (-0.9% between 1976-77 and 1977-78, as compared with -2.6% reduction the year before).

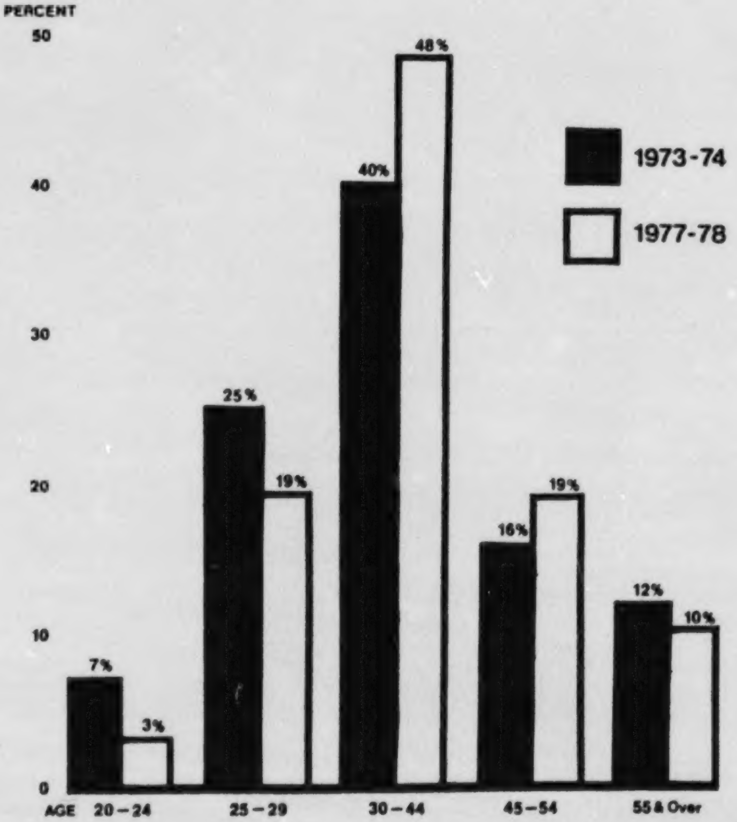
The decline in the number of FTE positions has been more precipitous in First Class Cities (Minneapolis, St. Paul and Duluth) where a 12 percent decrease has occurred since 1973-74, resulting in a net loss of 872 staff over the five-year period.

Characteristics of Professional Staff

Age

There are fewer young and fewer old persons in the educator cadre. Data since 1973-74 indicates that there has been particular growth in the 30-44 year age group, as depicted in Exhibit Two. In 1973-74, 32 percent of FTE staff were between the ages of 20 and 29; by 1977-78, only 22 percent fit that classification. Conversely, the percentage of middle-aged staff is increasing: by 1977-78, 48 percent of all educators in Minnesota were between the ages of 30 and 44, compared with 40 percent in 1973-74.

EXHIBIT 2
AGE OF FTE PROFESSIONAL STAFF
1973-74 AND 1977-78



The decrease in the percentage of staff over age 54 (12% of the cadre in 1973-74 to 10% in 1977-78) has important implications for turnover within the educator cadre, for this is the age group nearing retirement. This is a reflection of a trend evident in the labor force as a whole. The age group 45 and over has declined since 1970 and is projected to decline until 1980 until that group will consist primarily of the relatively small number of persons born between 1920 and 1934, the so-called "depression" cohort.[2] As fewer retire, a cap is in effect put on top of the labor force and fewer replacement slots for new teachers become available within the cadre. This is reflected in relatively stable clusters of mature staff. One implication of this trend concerns the potential drain on teacher retirement monies as large numbers of educators reach retirement age simultaneously. When current data is projected, over 14,000 educators will be eligible to retire at age 65 between 1999 and 2008, as compared with 6,359 [3] who retired between 1968 and 1978.

The aging of the cadre is especially evident in the Twin Cities metropolitan area (Region 11). In 1977-78, 82 percent of all professional staff were over age 30 with only 8.8 percent over age 55. The decline in the percentage of younger staff aged 20-29 has been more precipitous; by 1977-78, only 18 percent of the total staff was younger than 29 years of age. As Table 3 reveals, the trends apparent for the state as a whole are more pronounced in the metropolitan area.

Sex

The years 1973-74 to 1977-78 have witnessed a slight overall increase in the proportion of males in the educator cadre. In 1973-74, 46.8 percent of professional staff were male; by 1977-78, the figure was 47.1 percent. This may be due to layoffs over the last four years at the elementary level where women are more numerous.

When staff assignments themselves are scrutinized, interesting phenomena emerge. Most elementary teaching staff are female (78% in 1977-78), while elementary principals continue to be male (89% in 1977-78). The proportion of male principals in elementary schools has increased 2 percent since 1973-74; conversely, the number of women holding that position has decreased from 117 in 1973-74 to 92 in 1977-78. (It should be noted that all administrative classifications include assistants.) The same pattern of male dominance holds for all types of administrative positions, as Table 4 illustrates. With the exception of English/Language/Speech and Special Education, secondary teaching fields also exhibit a preponderance of males.

TABLE 3

AGE OF TOTAL PROFESSIONAL STAFF IN THE METROPOLITAN AREA (REGION 11 AS COMPARED WITH THE BALANCE OF THE STATE (NON-METRO) 1973-74 AND 1977-78

Age Group & Year	Metro Area (Region 11) Percent FTE Staff	*Non-Metro State Totals Percent FTE Staff
Age 20-24		
1973-74	5.1%	8.4%
1977-78	1.9%	4.4%
Age 25-29		
1973-74	27.0%	24.2%
1977-78	16.0%	20.9%
Age 30-44		
1973-74	43.4%	37.3%
1977-78	53.1%	44.7%
Age 45-54		
1973-74	16.0%	15.9%
1977-78	20.2%	17.8%
Age 55 & over		
1973-74	8.6%	14.1%
1977-78	8.8%	11.4%
TOTAL	100 %	100 %

* Balance of State, eliminating Region 11

TABLE 4

SEX OF PERSONS IN SELECTED ADMINISTRATIVE POSITIONS 1977-78

Position and Sex	Number FTE	Percent
Superintendents		
Male	478.64	98.97%
Female	5.00	1.03%
Secondary Principals		
Male	932.85	96.94%
Female	29.43	3.06%
Secondary Instructional		
Male	14,287.33	66.6%
Female	7,165.51	33.4%
Elementary Principals		
Male	720.08	88.67%
Female	91.99	11.33%
Regular Elementary Instructional		
Male	3,174.04	13.3%
Female	11,549.71	78.4%
Special Education Directors*		
Male	58.50	80.5%
Female	14.17	19.5%
Special Education Teachers		
Male	891.62	19.2%
Female	3,755.60	80.8%

* Does not include Supervisors (62% male of 76.3 FTE positions)

Training

Minnesota's educator cadre is increasingly highly trained. In 1973-74, 24 percent of all FTE staff held Master's degrees or more; by 1977-78, the proportion had increased to 28 percent. Larger school districts, particularly those in Twin Cities metropolitan area (Region 11) and Cities of the First Class (Minneapolis, St. Paul and Duluth), display an even more pronounced trend toward a highly trained staff as Table 5 shows.

TABLE 5

TRAINING LEVELS OF TOTAL FTE PROFESSIONAL STAFF IN THE METROPOLITAN AREA AND FIRST CLASS CITIES AS A PERCENT OF TOTAL STAFF 1973-74 AND 1977-78 OF TOTAL STAFF 1973-74 AND 1977-78

Training	Metro Area (Region 11) %FTE Staff	First Class Cities % FTE Staff	*Non-Metro State Totals % FTE Staff
B.A. or less			
1973-74	70.9%	67.5%	79.3%
1977-78	66.2%	61.3%	77.3%
5 Year			
1973-74	.1%	.2%	.2%
1977-78	.1%	.2%	.3%
Master's			
1973-74	27.2%	30.4%	19.8%
1977-78	31.3%	35.7%	21.2%
Specialist			
1973-74	.9%	.9%	.3%
1977-78	1.3%	1.4%	.7%
Doctorate			
1973-74	.9%	1.1%	.3%
1977-78	1.1%	1.4%	.4%
TOTAL	100 %	100 %	100 %

* Balance of State, eliminating Region 11 (includes Duluth)

By 1977-78, 38.5 percent of all staff in Minneapolis, St. Paul and Duluth had earned Master's degrees or more, eclipsing both the percentage statewide as well as the proportion in all other types of school districts (22%). By comparison, only 14.1 percent of staff in school districts enrolling fewer than 299 students had attained this level of training. Since staff salaries are tied to their levels of training, this increasing professionalization has important financial implications for local school districts.

Experience

As might be predicted, the proportion of professional public school personnel with more than ten years of education experience has increased during the last five years. In 1977-78, 52 percent of all educators had logged eleven or more years of experience. This is the first year in which the majority of staff displayed this characteristic. Table 6 summarizes trends in experience levels for two different types of school districts—very large and very small—and for the state as a whole.

TABLE 6

EXPERIENCE LEVELS OF TOTAL PROFESSIONAL STAFF AS A PERCENT OF ALL STAFF IN SELECTED TYPES OF DISTRICTS, 1973-74 AND 1977-78

Experience	District Size 0-299	Cities of the First Class	State Totals
0-10 Years			
1973-74	58.8%	49.0%	55.8%
1977-78	65.0%	37.8%	47.8%
11-19 Years			
1973-74	21.3%	27.9%	26.5%
1977-78	20.9%	36.2%	32.2%
Over 20 Years			
1973-74	19.9%	23.1%	18.0%
1977-78	14.0%	26.1%	20.0%
TOTAL	100 %	100 %	100 %

Once again, the data indicates that the trends in larger school districts are similar to those statewide, but are more pronounced. However, the reversal of the trend toward more experienced staff in small school districts is striking. In 1977-78, not only a greater proportion of staff, but also a greater number, had been in these districts fewer than ten years (487 FTE staff in 1973-74 compared with 983 in 1977-78). Small districts, therefore, may be offering career opportunities for inexperienced teachers who, in turn, will move onto another district or other employment after a few years. The magnitude of this role is, however, difficult to assess without further breakdowns of the available data into smaller units of years of experience. Future analysis will accomplish this and will also study the caracteristics of newly hired personnel.

Salary

Salaries of professional staff have increased by approximately one-third since 1973-74. In 1973-74, the average salary earned by professional staff was $11,388; by 1977-78, it had increased to $15,155. Annualized salaries[4] show an increase of 34.5 percent from $15,358 in 1973-74 to $20,651 in 1977-78.

The percentage of dollar increase in staff salaries since 1973-74 is consistent throughout school districts of different sizes, although actual dollar amounts vary. As might be expected, staff salaries in large school districts (greater than 18,000 in enrollment, First Class Cities) are higher than the state average. In addition, data indicate variation in salary by geographic region. Professional staff in Regions 3 (Northeast) and 11 (Metro) are more highly paid than those in other areas; this may be due to the inclusion of the cities of Duluth, Minneapolis and St. Paul. Educators in Region 1 (Northwest) receive the lowest average remuneration. Preliminary analysis indicates a positive relationship between county median income and staff salary. Future investigation will probe this relationship.

As the number of mature, highly trained staff increases, so will salaries. In addition, the effectiveness of collective bargaining by teachers is reflected in substantial salary increases each year. While expenditures for salaries per pupil unit have not increased as rapidly as non-salary expenditures, their rate of growth has outstripped the Consumer Price Index (CPI) since 1969-70 and continues to comprise the major expense for school districts. (Between 1969 and 1975, the CPI rose by 46.4%, while salary expenditures per pupil unit increased by 56%.)[5] On the other hand, the overall percentage increase in staff salaries of 34 percent between 1973-74 to 1977-78 has not kept pace with the rise in the CPI.

Assignment

With the exception of three fields (Special Education, Secondary Vocational and Secondary Principals). all professional assignment areas exhibit declines in FTE professional staff during the past five years. Data indicate that the number of FTE staff at the elementary level has continued to decrease since 1973-74; a similar decline began to occur at the secondary level in 1974-75. The year 1977-78 is particularly significant in that it is the first time that Minnesota experienced an overall net decline of 1.4 percent in the total number of FTE staff, despite continued growth in Special Education. Table 7 summarizes this data.

TABLE 7

CHANGES IN FTE PROFESSIONAL STAFF BY ASSIGNMENT
1973-74 TO 1977-78
STATE TOTAL

Assignment	Change in FTE Positions (Inc/Dec)	Percent Change
Kindergarten	- 122.22	- 9.12%
Elementary	- 982.38	- 5.56%
English/Language/ Speech	- 330.2	- 6.88%
*Art/Music	- 44.84	- 2.28%
*Math/Science	- 158.01	- 3.22%
Vocational	+ 116.83	+ 2.33%
*Social Studies	- 43.20	- 1.35%
*Phy. Ed./Health	- 30.81	- 1.47%
Special Education (Total)	+ 1,802.37	+ 60.2%
*Coordinators, Directors	- 23.96	- 9.28%
Other Administrators	- 33.85	- 4.33%
Superintendents	- 20.31	- 4.03%
Principals, Elementary	- 60.58	- 6.94%
Principals, Secondary	+ 4.23	+ .4%
Pupil Personnel	- 123.92	- 4.21%
Other Professionals	- 29.94	- 6.29%

NET DECREASE: -80.79

* Indicates 1977-78 as the first year of decline

The rate of growth in Special Education is particularly dramatic. In 1973-74, the 2,994 FTE positions in Special Education accounted for 5.9 percent of the total staff; by 1977-78, the number of positions had increased to 4,796 or 9.5 percent of the total staff. This is an increase of 60 percent. School districts in all size categories exhibit growth in Special Education, despite the fact that staff may be decreasing in other areas. The yearly addition of staff positions in Special Education masks the impact of decline on the rest of the educator cadre. If Special Education category is removed, the period 1973-74 to 1977-78 witnessed a decrease of 2,004 FTE positions statewide.

As might be expected, the proportion of positions in each assignment area relative to the number of total staff also declined, although there were notable exceptions. Namely, the proportion of principals, administrators, and superintendents to total staff remained constant during the five-year span; this was not true for the other assignment areas, which reflect decline.

School district staffing patterns are affected differentially by enrollment changes. Table 8 shows the change (increase or decrease) in the total number of FTE professional staff by size of school district enrollment (0-299;[6] 800-1,799; over 1,800; Cities of the First Class) for the years 1974-75 through 1977-78, using 1973-74 as the base year.

TABLE 8

CHANGE IN THE NUMBER OF FTE STAFF BY DISTRICT SIZE, 1973-74 TO 1977-78

District Size	Total No. FTE Staff	Change In FTE Positions	Percent Change
0-299			
1973-74	828.02	—	—
1974-75	1,177.88	+ 349.86	+ 42.2%
1975-76	1,272.96	+ 95.08	+ 8.1%
1976-77	1,415.94	+ 142.98	+ 11.2%
1977-78	1,510.72	+ 94.78	+ 6.7%
Net Change:		+ 682.70	+ 82.4%
300-799			
1973-74	5,555.28	—	—
1974-75	5,496.32	- 58.96	- 1.0%
1975-76	5,675.46	+ 179.14	+ 3.3%
1976-77	5,758.77	+ 83.31	+ 1.5%
1977-78	5,436.41	- 322.36	- 5.6%
Net Change:		- 118.82	- 2.1%
800-1799			
1973-74	8,489.68	—	—
1974-75	8,572.94	+ 83.26	+ .98%
1975-76	8,774.30	+ 201.36	+ 2.3%
1976-77	8,537.98	- 236.32	- 2.7%
1977-78	8,681.25	+ 143.27	+ 1.7%
Net Change:		+ 191.57	+ 2.3%
Over 1800			
1973-74	28,139.18	—	—
1974-75	28,305.40	+ 166.22	+ .6%
1975-76	28,606.06	+ 300.66	+ 1.1%
1976-77	28,728.22	+ 122.16	+ .4%
1977-78	28,195.21	- 533.01	- 1.9%
Net Change:		+ 56.03	+ .2%
First Class Cities			
1973-74	7,170.29	—	—
1974-75	6,836.57	- 333.72	- 4.7%
1975-76	6,786.37	- 50.2	- .7%
1976-77	6,423.90	- 362.47	- 5.3%
1977-78	6,298.12	- 125.78	- 1.9%
Net Change:		- 872.17	- 12.6%
State Total			
1973-74	50,720.79	—	—
1974-75	50,743.57	+ 22.78	+ .04%
1975-76	51,528.83	+ 785.26	+ 1.5%
1976-77	51,347.73	- 181.11	- .35%
1977-78	50,640.00	- 707.73	- 1.4%
Net Change:		- 80.79	- .15%

Two striking facts emerge in examining Table 8:

1. School districts display widely different patterns of change in FTE staff.
    a. Small districts (enrollment 0-299) exhibit steady growth in FTE staff. This is due to several factors, including:
        1) The 0-299 category contains more school districts because of enrollment declines (48 districts in 1973-74, 64 districts in 1977-78).[7]
        2) Staff are being retained in the face of enrollment declines to maintain minimum programs.
        3) Additional staff in Special Education have been hired to meet state and federal guidelines.
    b. Districts with enrollments of 300-799 and over 1,800 reflect growth through 1976-77 followed by steep decline.
    c. The enrollment category 0-1,799 includes both growth and decline districts. FTE staff in these districts has increased by two percent since 1973-74.
    d. Cities of the First Class have experienced continuous decline in FTE staff since 1973-74.
2. The course of events in 1976-77 resulted in drops in FTE staff for most districts for the year 1977-78.

Future analysis will examine staffing patterns in various types of districts by identifying FTE staff/1000 pupils (service capability) since 1973-74.

Decline or growth patterns in individual assignment areas within each type of school district also vary. More subject areas declined in 1977-78 in all districts than in previous years. While the number of declining areas has increasingly included secondary staff, the different staffing patterns among districts is interesting, for it is based, in most cases, on program decisions at the local level. To date, it appears that elective subjects at the secondary level are not being extensively cut. For example, the proportion of FTE staff in Art and Music has remained fairly constant relative to the total cadre: Art and Music teachers accounted for 3.9 percent (1,962 FTE positions) of the total cadre in 1973-74 and 3.8 percent in 1977-78 (1,917 FTE positions). However, as enrollment declines affect high schools more seriously, the next five years may witness the elimination or curtailment of elective program areas.

21

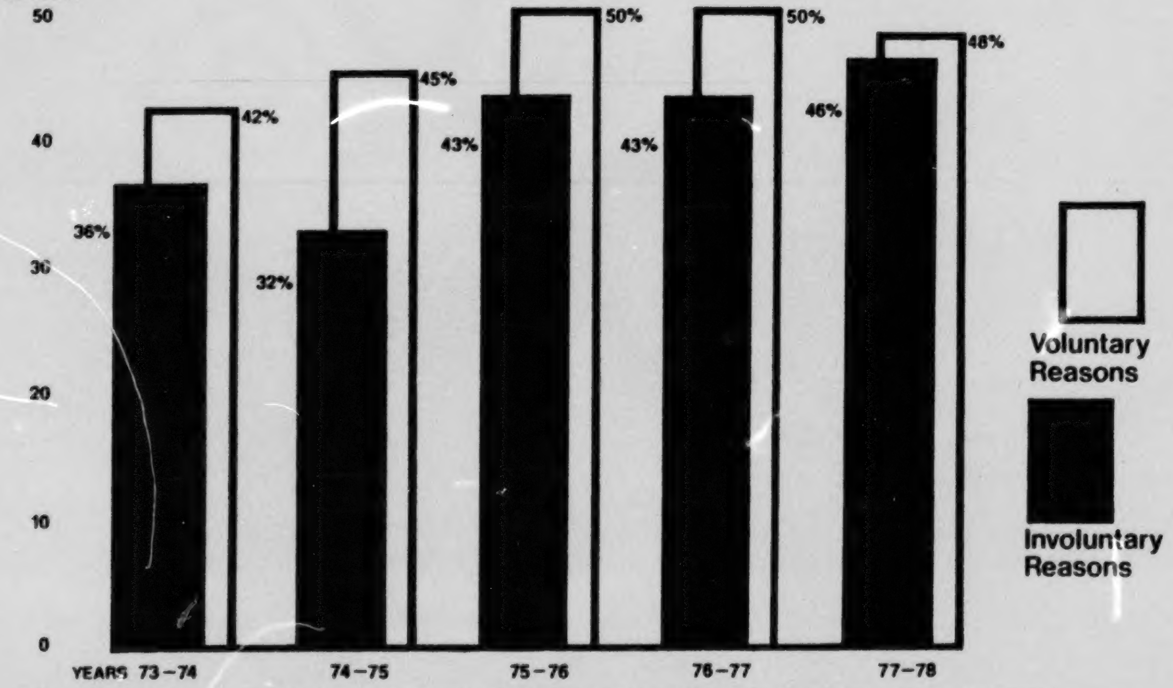
Terminations

TABLE 9
PROFESSIONAL STAFF: TERMINATION OF CONTRACT BY REASON

	73-74	74-75	75-76	76-77	77-78	Totals
INVOLUNTARY REASONS:						
Retirement	788	738	731	824	754	3,835
Death	80	77	49	74	68	348
Illness	66	45	68	65	56	300
Spouse Transferred	520	447	271	372	288	1,898
Not Re-employed	367	288	423	377	254	1,709
Staff Reduction	*	37*	78	265	664	1,044
Subtotal: Involuntary	1,821	1,632	1,620	1,977	2,084	
VOLUNTARY REASONS:						
Marriage	231	166	185	146	115	843
Maternity	241	231	170	256	122	1,020
Return to Homemaking	507	498	404	526	502	2,437
Travel	21	13	6	17	10	67
Personal Reasons	214	352	273	399	320	1,558
Other Educational Occupation	117	143	108	105	104	577
Professional Growth	163	156	194	178	171	862
Military Service	13	9	4	5	2	33
Left Education Profession	604	692	505	671	829	3,301
Subtotal: Voluntary	2,111	2,260	1,849	2,303	2,175	
UNKNOWN REASONS:	1,097	1,178	257	309	227	3,068
TOTALS	5,029	5,070	3,726	4,589	4,486	22,900

* Staff Reduction category created in 1974-75

EXHIBIT 3
RELATIONSHIP OF VOLUNTARY TO INVOLUNTARY STAFF TERMINATIONS, 1973-74 TO 1977-78



* Percentages for each year do not total 100 percent, due to a third category, designated as "Reason Unknown."

Table 9 displays the number of professional staff whose contracts were terminated since 1973-74.

So called "voluntary terminations" have decreased since 1976-77. Although a definitive trend cannot yet be identified, data indicate that the changing role of women is beginning to be reflected by reductions in the number of women resigning to bear children, marry, follow their spouses, or return to homemaking. An important exception, however, to the general decrease in voluntary terminations is the category coded "Left Education Profession." In 1977-78, 829 persons (18.5% of all voluntary terminations) left education for other employment, an increase of 158 persons since 1976-77.[8] On the whole, however, the balance of voluntary to involuntary terminations is shifting, as shown in Exhibit Three. In 1976-77, voluntary terminations outweighed involuntary terminations by 326 persons (7%). In 1977-78, the difference was much less significant—91 persons (2%).

As voluntary terminations decrease, those in the involuntary category are increasing. This is primarily due to so-called staff reductions (*i.e.*, terminations due to a combination of budget considerations and declining enrollments—it does not include those who were laid off because of unsatisfactory job performance).

In 1976-77, 265 persons were placed on unrequested leave or terminated and not rehired in the same school district; in 1977-78, 664 professional staff were affected. In one year, then, the number of staff reductions almost tripled. As enrollment declines continue, so will increases in this category.

The drop in the number of retirements should also be noted, for it is consistent with the age data presented earlier in this report. In 1977-78, 754 persons retired from Minnesota public schools; 70 fewer persons than in 1976-77. This trend will continue as long as fewer persons in the educator cadre reach retirement age unless more are enticed by early retirement incentives. Indeed, the early retirement legislation passed by the Legislature since 1977 offers incentives in the form of severance pay for staff over age 55 who elect to retire. It is ironic that despite these provisions, it appears that proportionately few persons will be eligible to take advantage of them.

Although a special study will examine those staff involuntarily terminated due to budget considerations (coded "Staff Reduction") and those persons voluntarily leaving education for other employment (coded "Left Education Profession"), data already collected affords a sketch of their characteristics.[9] Table 10 summarizes. Of the 656 staff involuntarily terminated, 155 or 23.6 percent were hired in another district. This resulted in a net displacement of 501 professional staff, or approximately 1 percent of all public school educators in Minnesota.

TABLE 10

CHARACTERISTICS OF PROFESSIONAL STAFF VOLUNTARILY LEAVING EDUCATION FOR OTHER EMPLOYMENT AND STAFF PLACED ON UNREQUESTED LEAVE AND NOT REHIRED BY OCTOBER 1, 1977

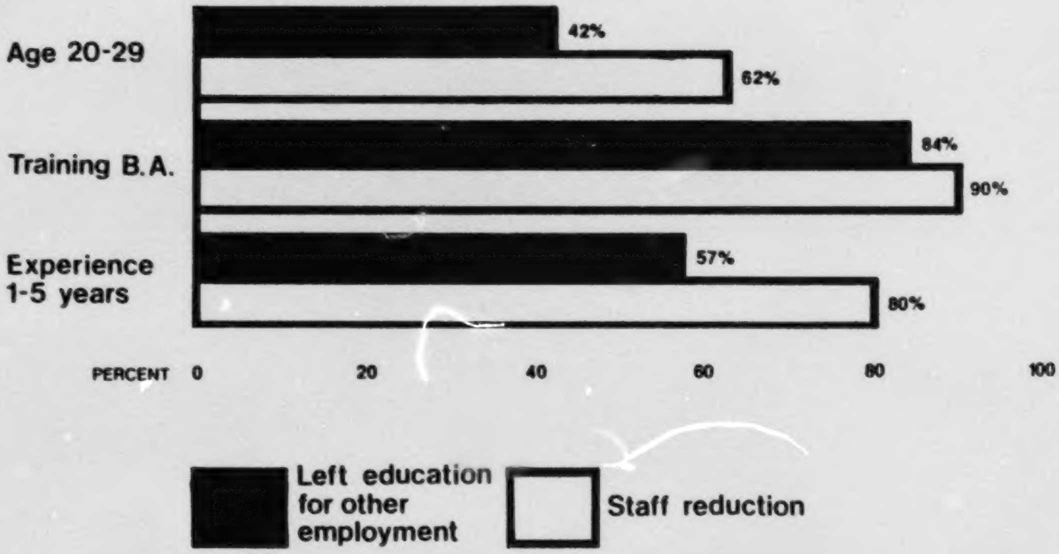
	Other Employment		Unrequested Leave	
Characteristic	Number	Percent	Number	Percent
Age				
20-24	65	8%	145	22%
25-29	273	34%	265	40%
30-34	242	30%	113	17%
35-44	154	19%	91	14%
45-54	54	7%	27	4%
55-59	5	1%	12	2%
60 +	5	1%	3	1%
	798	100%	656	100%
Training				
B.A. or less	669	84%	589	90%
M.A.	117	14%	64	9%
Specialist	5	1%	2	.5%
Ph.D.	7	1%	1	.5%
	798	100%	656	100%
Experience in Years				
1-5	458	57%	526	80%
5-10	218	27%	95	14%
11-15	62	8%	20	3%
16-20	34	4%	9	2%
20 +	26	4%	6	1%
	798	100%	656	100%

As Exhibit Four shows, those persons terminated due to staff reductions in 1977-78 were younger and had less education experience than staff who voluntarily left for other employment. Sixty-two percent of these persons were younger than age 30; 80 percent had less than five years teaching experience. On the other hand, most staff leaving for different jobs were between the ages of 25 and 44 (83%), and had slightly more teaching experience (only 57% had been in the system less than five years). In addition, staff most often terminated were in Elementary, Physical Education, English or Social Studies assignments, while many of those who voluntarily found other employment were in vocationally related areas such as Science, Agriculture, Math and Trades and Industry.

Interesting comparisons may be made among the geographic locations of school districts and voluntary/involuntary terminations. Except in the metropolitan area (Region 11), the patterns of staff voluntarily leaving education for other employment were similar among districts in 1977-78 and ranged from 1 to 4 percent of the total FTE staff in each

EXHIBIT 4

CHARACTERISTICS OF STAFF TERMINATED DUE TO REDUCTIONS IN FORCE AND THOSE WHO LEFT EDUCATION FOR OTHER EMPLOYMENT, 1977-78



development region. In addition, eleven of the thirteen development regions displayed a relative balance between those voluntarily leaving education for other employment and staff reduction.

However, Regions 10 (Southeast Minnesota) and 11 (Metropolitan area) were particularly hard-hit by staff layoffs. Sixty-four percent of the total 656 staff placed on unrequested leave in 1977-78 and not rehired by the same district worked in Region 10 or 11. Within Region 11, school districts were affected differentially by staff reductions. Of the 49 districts in the metro area, 24 reported that all teachers placed on unrequested leave had been rehired. Twenty districts reported terminations of up to sixteen teachers. These included Minneapolis (0) and St. Paul (3). Staff reductions in five suburban districts—Robbinsdale, Hopkins, Bloomington, St. Louis Park and Richfield—accounted for approximately 65 percent of the 317 metro layoffs. While it is difficult to predict the exact dimensions of future terminations, both voluntary and involuntary, it is safe to assume that school districts will continue to be affected differently.

Chapter Footnotes

[1] Discrepancies in the data are apparent when an attempt is made to equate FTE position decrease with layoffs. This is ddue to inaccurate reporting of layoffs by some districts as well as their practice of not replacing some teachers who resign or retire. Therefore, the change in the number of FTE positions and the number of professional staff who are terminated are not comparable.

[2] Minnesota State Planning Agency, Minnesota Labor Force Projections 1970-1990, July 1976.

[3] Source: Teacher Retirement Association

[4] Annualized Salary = [Average Salary ÷ Number of Weeks worked] × 52 Weeks

[5] The Condition of Education, Minnesota State Planning Agency, 1977, p. 11

[6] Excluding Secondary Vocational Centers and Special Education Cooperatives.

[7] Future Analysis will establish 1973-74 as a base line year and freeze size categories to eliminate this problem.

[8] This phenomenon is so significant that another study being conducted by the Minnesota State Planning Agency will probe the motivations and experiences of those 829 professionals and will compare them with the 664 staff whose contracts were terminated due to reduction in force.

[9] Due to reporting inaccuracies by school districts,, the total numbers of staff represented in this analysis is slightly different from numbers reported in the preceding section. Differences, however, (8 for involuntary; 31 for involuntary) are not significant for the purpose of this paper.

MAJOR FINDINGS ON UNEMPLOYMENT INSURANCE COSTS

This study focuses on unemployment insurance received during the period May, 1977 through April, 1978 by professional staff who were laid off by local school districts in the spring of 1977. The analysis identifies three groups of claimants:

1. All professional staff who were terminated or placed on unrequested leave of absence by a local school district in the spring of 1977 and not rehired in the same district by October 1, 1977.
2. Professional staff who were terminated or placed on unrequested leave of absence by one local school district in the spring of 1977 and hired in a different district by October 1, 1977.
3. Professional staff in school districts in the Twin Cities metropolitan area (Region 11), Rochester and Duluth who were terminated or placed on unrequested leave of absence in the spring of 1977 and rehired in the same district for the 1977-78 school year.

Analysis is based on data collected in a set of special studies by the Minnesota Department of Economic Security and the State Planning Agency in cooperation with selected local school districts.

UNEMPLOYMENT COMPENSATION UNDER THE LAW

All political subdivisions of the State of Minnesota or instrumentalities thereof became covered as of January 1, 1974 for unemployment insurance subject to the Minnesota Employment Services Law. Local school districts are included under this provision. Therefore, all personnel who work for public schools are part of covered employment. This includes professionally licensed staff as well as cooks, custodians, cafeteria workers, and support personnel. Persons in these positions are eligible to use wage credits earned from public schools to file for unemployment insurance between school terms if they are separated for an indefinite period of time prior to the end of a given school year.

As of January 1, 1978, the Minnesota Employment Services Law was changed to permit school employees to use wage credits earned in a local school district to file for unemployment insurance if they have not received "reasonable assurance" of employment in the same or in a similar capacity. A finding of "reasonable assurance" for any unemployment insurance claim means that a school district provides the Minnesota Department of Economic Security with written confirmation if there is a written, verbal, or implied agreement that a given individual will be returning to work in the same or in a similar capacity. Wages earned with a school district cannot be used to pay benefits between school terms (usually the summer) if there is reasonable assurance that the individual will perform services in the successive academic year or term.

The eligibility of staff who are terminated or placed on unrequested leave of absence and who have not received "reasonable assurance" of employment in the next school year is further determined by three requirements.

1. An individual must have earned a minimum of $50 per week for 15 weeks in the base period.[1] These total earnings in the base period may be received from more than one employer.
2. An individual's reason for separation from an employer must be generally due to involuntary layoff or termination with good cause attributable to the employer. Disqualifying conditions include discharge due to misconduct and voluntary termination without good cause attributable to the employer.
3. An individual must be available for work, willing to work, and actively seeking employment.

The concept of an employee's entitlement to benefits is basic to the system of unemployment insurance given the rules of absence of reasonable assurance, minimum wage credits, qualifying reason for separation, and availability for work. The program is considered an insurance policy which protects workers who qualify against uncertainties of irregular income.

Weekly amounts received by claimants vary. They are based on gross earnings in the base period. The maximum weekly amount as of July 3, 1977 was $122 per week; this rose to $133 as of July 2, 1978. A person must have averaged weekly earnings of $265 or more to receive this amount.[2] The maximum number of weeks of duration of normal benefits is 26; thereafter, based on an insured employment rate, a 13 week period of extended benefits may occur.

Once all available benefits for which an individual is eligible are used, benefits are said to be "exhausted."

School districts reimburse the Minnesota Department of Economic Security dollar for dollar for payments made to former employees.[3] Billings occur semi-annually. Monies used for reimbursement of unemployment compensation are included in the local tax levy. If monetary obligations to the state exceed local levy limitations, a district may levy in excess of the limitation. Although unemployment insurance monies are included in the General Fund of a local district's budget, they are earmarked and may not be used for other expenses.

UNEMPLOYMENT INSURANCE RECEIVED BY PROFESSIONAL STAFF WHO WERE NOT REHIRED IN THE TERMINATING DISTRICT

This group of claimants consists of the 651 professional staff who were terminated or placed on unrequested leave of absence in the spring of 1977 and not rehired in the same district by October 1, 1978. Information analyzed covers the time period May, 1977 through April, 1978.

Number of Recipients

Of the total 651 terminated professional staff, 355 or 54.5 percent received unemployment insurance. As depicted in Exhibit Five, the number of persons receiving benefits rose rapidly in June and July and peaked in August with 282 claimants. Thereafter, a gradual decrease occurred through April, 1978. This pattern reflects the end-of-the-school-year job termination patterns of educators and their gradual return to work.

EXHIBIT 5
UNEMPLOYMENT INSURANCE RECIPIENTS EACH MONTH May, 1977 - APRIL, 1978

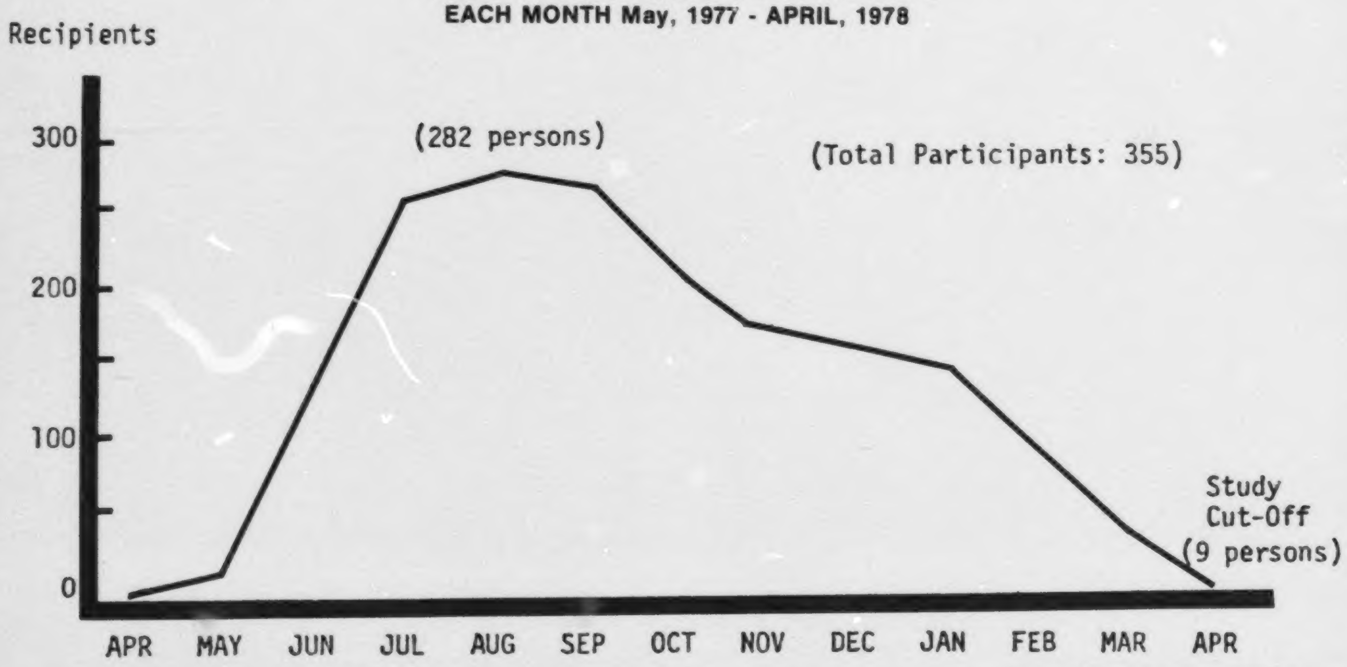


TABLE 11

INDIVIDUALS WHO RECEIVED UNEMPLOYMENT INSURANCE AS A PROPORTION OF ALL TERMINATED PROFESSIONAL STAFF BY DEVELOPMENT REGION*

Residence By Development Region		Total Number Terminated	Number of Recipients	Percent
1	Northwest	24	11	45.8%
2	Headwaters	7	5	71.4%
3	Arrowhead	57	36	63.2%
4	West Central	30	9	33.3%
5	Region 5	6	7	100.0%
6E	Six East	20	8	40.0%
6W	Six West	18	4	22.2%
7E	East Central	9	4	44.4%
7W	Central Minnesota	12	9	75.0%
8	Southwest	23	10	43.5%
9	Region 9	31	12	38.7%
10	Southeastern	102	47	46.1%
11	Metropolitan Council	317	163	51.4%
	Commuters-Other States**		6	
	Interstate***		24	
	Total	651	355	54.5%

* Discrepancies exist in some cases in that region of residence and region of job termination are not the same for some individuals. Unemployment insurance claims are filed in the region of residence rather than the region of job termination.

** "Commuters — Other State" are persons who live in an adjoining state but who were employed in Minnesota. These persons commute to Minnesota to file their claims.

*** "Interstate" claimants are residents of any other state who established a Minnesota claim based entirely or partially on earnings in Minnesota.

Recipients by Region

As shown in Table 11, the proportion of terminated staff who filed for and received unemployment insurance varies by development region. Although interpretation is difficult due to discrepancies between region of residence and that of job termination, data indicates that at least 22 percent of all terminated staff in any given region received unemployment insurance. The proportion of recipients to total terminated staff ranges from 22 percent in Region 6W to 75 percent in Region 7W. It is interesting to note that only 59.2 percent (210 persons) of all terminated staff in Regions 10 and 11 received unemployment insurance, even though school districts in these areas reported 64 percent of staff layoffs statewide (419 persons).

Most recipients lived in Regions 3, 10, or 11. Again, these regions reported 73 percent of all staff terminations (476 persons).

Amounts Received and Duration of Payments

A total of $647,797 was paid in benefits to the 355 claimants The average total amount received by an individual was $1,824.78. Weekly payments averaged $103.32 for a span of 17.7 weeks.

Table 12 displays regional variations of the payment data.

TABLE 12

PAYMENTS BY DEVELOPMENT REGION

MAY, 1977 - APRIL, 1978

Residence by Development Region		Total Recipients	Amount Paid	Average Weekly Amount	Average Amount Paid Per Individual	Average Duration (Weeks)
1	Northwest	11	$ 25,166	$113.36	$2,287.82	20.2
2	Headwaters	5	5,344	97.16	1,068.80	11.0
3	Arrowhead	36	90,600	102.72	2,516.67	24.5
4	West Central	9	17,116	97.81	1,901.78	19.4
5	Region Five	7	10,325	106.44	1,475.00	13.9
6E	Six East	8	15,229	89.58	1,903.63	21.3
6W	Six West	4	8,473	103.33	2,118.25	20.5
7E	East Central	4	9,329	99.24	2,332.25	23.5
7W	Central Minnesota	9	23,018	101.85	2,557.56	25.1
8	Southwest	10	14,822	100.15	1,482.20	14.8
9	Region Nine	12	24,543	100.18	2,045.25	20.4
10	Southeastern	47	85,128	98.99	1,811.23	18.3
11	Metropolitan Council	163	278,556	106.56	1,708.93	16.0
	Commuters - Other States	6	7,875	99.68	1,312.50	13.2
	Interstate	24	32,273	100.54	1,344.71	13.4
	Total	355	$647,797	$103.32	1,824.78	17.7

Amounts Paid and Duration of Payments by Region

The fluctuation in the average weekly amounts paid to individuals by development region is difficult to analyze. This is due to the responsiveness of the weekly amount to gross earnings, earnings and wage credits while claiming unemployment, wage credits from other employers, and the small number of recipients in many of the regions. Therefore, no definite conclusions may be drawn on the average weekly benefit amount by development region.

The number of weeks that individuals received benefits also varied by development region. The duration of payments is influenced by the number of persons who exhausted their benefits and therefore did not find employment. With this caution, the range among regions in the duration of benefits may be considered. Persons living in Region 2 had the shortest span of payments—11.0 weeks; persons living in Region 7W were unemployed the longest—25.1 weeks. It could be assumed, however, that the characteristics of the individual claimants has as much to do with duration of unemployment as the availability of jobs.

The average total amount paid per individual is a function of the weekly benefit amount and the weeks of duration. Therefore, it is subject to the distortions discussed previously. With this in mind, regional differences may be cited. Individuals living in Region 2 received the lowest total amount: $1,069. This was $75 less than the state average and $1,489 less than the highest average payments found in Region 7W. Individuals in all regions other than Region 2 received at least $1,300; persons in 6 of the 15 regions (including commuters and interstate claimants) received more than $2,000.

Characteristics of Recipients

It is particularly interesting to analyze the duration and total amount of payments according to the characteristics of recipients in terms of age, sex, and level of education. In general, persons who remained unemployed the longest and therefore received greater total benefit amounts were female, older than age 24, and held a Bachelor of Arts degree only.

Age

As Table 13 depicts, 63.1 percent (224 persons) of terminated staff who received benefits were between the ages of 20 and 29. This is consistent with data on staff placed on unrequested leave which indicates that 62 percent of that pool were aged 20-29. The duration of unemployment increased sharply with age, even though 79 percent of all recipients were younger than age 35. Persons aged 20-24 were unemployed an average of 13.8 weeks, while those 55-59 were jobless an average of 27.2 weeks, which is almost double. As can be expected, the average amounts paid per individual increased with age, with the youngest recipients receiving the least.

TABLE 13

CHARACTERISTICS OF RECIPIENTS

Characteristics	Number of Individuals	(%)	Average Amount Paid Per Individual	Average Duration (Weeks)
Age				
20-24	72	(20.0)	$1404.01	13.8
25-29	152	(42.8)	1884.74	17.9
30-34	57	(16.1)	1940.21	18.8
35-44	50	(14.1)	1912.28	19.2
45-54	19	(5.4)	2056.89	20.7
55-59	5	(1.4)	2988.00	27.2
60 and over	0	(0)	—	—
Sex				
Male	114	(32.0)	1497.59	13.8
Female	241	(68.0)	1979.55	19.5
Years of Education				
12-16	250	(70.4)	1865.76	18.2
17-18	81	(22.8)	1765.74	16.7
19 and over	12	(3.4)	1665.42	15.3
Not known	12	(3.4)	1528.83	15.2
Total	355		$1824.78	17.7

Educational Level

However, the duration of unemployment and the amount received varied inversely with education. Recipients with 19 years or more of education were unemployed an average of 15.3 weeks, while those with 16 years averaged 18.2 weeks. Those individuals with the highest educational level received an average of $1,665 in benefits; this is $200 less than those persons at the lowest level. Seventy percent of recipients had a Bachelor of Arts degree only (12-16 years of education); this is consistent with layoff data indicating that most staff (90%) have earned a Bachelor of Arts degree only.

Sex

Women comprised the largest group of recipients—68 percent of the total 355 persons. Again, a majority (72.6%) of staff placed on unrequested leave and not rehired in 1977 were women. Women had a longer duration of unemployment than men: 19.5 weeks compared with 13.8 weeks.

EXHIBIT 6

CHARACTERISTICS OF UNEMPLOYMENT RECIPIENTS AND TOTAL PROFESSIONAL STAFF LAID OFF MAY 1977 — APRIL 1978

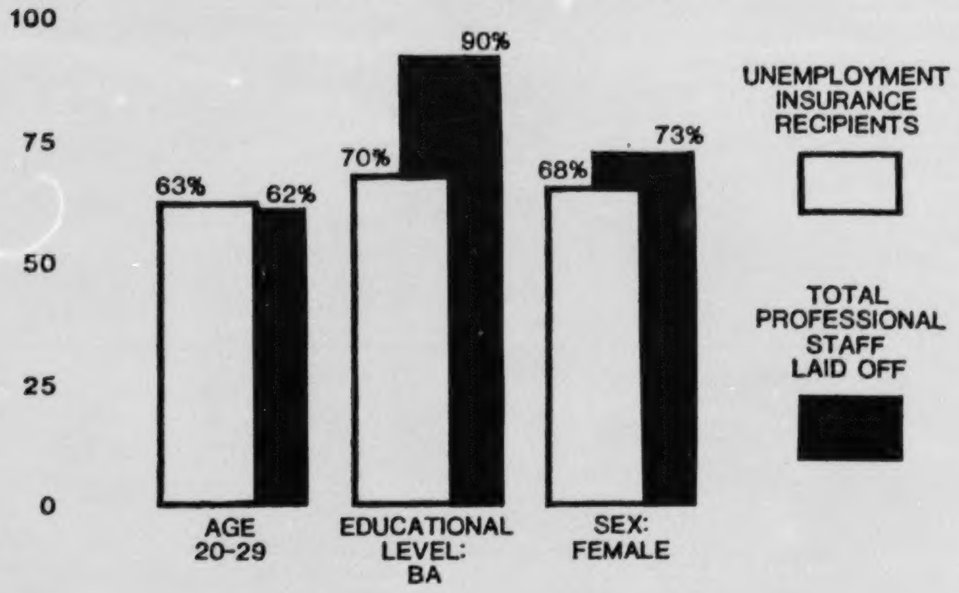


TABLE 14

RE-EMPLOYMENT PATTERNS OF RECIPIENTS MAY 1977 — APRIL 1978

	Residence Development	Total Number	Exhausted Benefits		Individuals Receiving UI Benefits Found Some Type of Employment and did not Exhaust		Claiming to be Unemployed the Last Week of April, 1978	
			Number	Percent	Number	Percent	Number	Percent
1	Northwest	11	4	36.4	7	63.6	0	0.0
2	Headwaters	5	0	0.0	4	80.0	1	20.0
3	Arrowhead	36	21	58.3	13	36.1	2	5.6
4	West Central	9	3	33.3	6	66.7	0	0.0
5	Region Five	7	1	14.3	6	85.7	0	0.0
6E	Six East	8	3	37.5	5	62.5	0	0.0
6W	Six West	4	2	50.0	2	50.0	0	0.0
7E	East Central	4	4	100.0	0	0.0	0	0.0
7W	Central Minnesota	9	6	66.7	3	33.3	0	0.0
8	Southwest	10	3	30.0	7	70.0	0	0.0
9	Region Nine	12	5	41.7	6	50.0	1	8.3
10	Southeastern	47	11	23.4	36	76.6	0	0.0
11	Metropolitan Council	163	45	27.6	114	69.9	4	2.5
	Commuters-Other States	6	2	33.3	4	66.7	0	0.0
	Interstate	24	10	41.7	13	54.2	1	4.2
	TOTAL	355	120	33.8	226	63.7	9	2.5

Since women were unemployed longer, they received more in total benefits.

Comparison with Total Staff Laid Off

Exhibit Six summarizes the characteristics of all persons who were laid off by local districts with those who received unemployment insurance benefits.

Reemployment Patterns of Recipients

The reemployment patterns of recipients by region may also be examined. The study assumed that individuals who terminated their benefits without exhausting them found employment. It may be concluded, therefore, that 63.7 percent (226 persons) of all recipients statewide had found work by the last week of April, 1978. Table 14 depicts regional variations in reemployment rates, although the small number of recipients in some regions limits generalizations. If commuters and interstate claimants are eliminated, data indicates that 70 percent (114 persons) of recipients in the metro area (Region 11) found employment, while 45 percent (95 persons) of those outside the metro area were successful in their job search. Conversely, 58 percent of non-metro recipients (63 persons) exhausted their benefits, compared with 42 percent (45 persons) in the metro area.

UNEMPLOYMENT INSURANCE RECEIVED BY STAFF WHO FOUND WORK IN A DIFFERENT DISTRICT

This group of claimants consists of the 155 professional staff who were placed on unrequested leave of absence or terminated in one school district in the spring of 1977 and hired in a different district by October, 1977. It is a subgroup and represents 23.7 percent of the total 655 staff placed on unrequested leave or terminated in the spring of 1977 and not rehired in the same district.

Number of Recipients and Amounts Received

Of the 155 individuals hired in another district, 69 (44.5%) received a total of $65,294 in unemployment benefits. As expected, both the duration of benefits and the average amount paid per individual was less than that for all 355 recipients. As Table 15 shows, the average duration of benefits for those persons hired in another district was 8.8 weeks, compared with 17.7 weeks for all recipients. Persons who found employment in other districts by October 1, 1977 received an average of $946.29 in benefits, while the average payment in the total group was $1,824.78.

Characteristics of Recipients

Data is not available on the sex and job location for rehired staff who received unemployment benefits. However, data collected on the total pool of 155 staff who were rehired in other districts may be representative of the claimant group. Fifty-nine percent (92 persons) of the 155 staff who found work in other districts were women. Ninety persons (58.1%) were laid off by school districts in the Twin Cities metropolitan area (Region 11).

TABLE 15

COMPARISON OF ALL RECIPIENTS WHO WERE LAID OFF AND NOT REHIRED IN THE SAME DISTRICT TO RECIPIENTS WHO WERE HIRED BY ANOTHER DISTRICT MAY 1977 — APRIL 1978

Unemployment Insurance Activity	All Recipients Laid Off & Not Rehired in the Same District (of 651 persons)	Recipients Laid Off From One District & Hired by Another (of 155 persons)
Individuals	355	69
Total Amount Paid	$647,797	$65,294
Average Weekly Amount	$103.32	$107.75
Average Amount Paid Per Individual	$1,824.78	$946.29
Average Duration (Weeks)	17.7	8.8

UNEMPLOYMENT INSURANCE RECEIVED BY PROFESSIONAL STAFF IN THE TWIN CITIES METROPOLITAN AREA, ROCHESTER AND DULUTH WHO WERE REEMPLOYED IN THE SAME DISTRICT

This group of claimants consists of the 269 professional staff who: (1) were terminated or placed on unrequested leave of absence in the spring of 1977 by school districts in the Twin Cities metropolitan area (Region 11), Rochester, and Duluth; (2) received unemployment insurance; and (3) were subsequently reemployed in the same district by October 1, 1977. It is a subgroup, representing 50.4 percent of the total 534 professional staff in these 51 districts who filed claims for and received unemployment insurance between June 1 and September 1, 1977.

Analysis is based on data collected from these 51 school districts in a special study conducted by the Minnesota State Planning Agency. The districts were selected for study because they reported the greatest number of staff terminations in 1977.[4]

Staff Layoffs and Reemployment

The 51 districts under analysis do not present a uniform picture of staff layoffs and reemployment. They can, however, be classified into four groups:

Group 1: Districts which neither terminated nor placed professional staff on unrequested leave of absence in 1977. Therefore, no unemployment insurance payments were incurred.

Group 2: Districts which terminated professional staff or placed them on unrequested leave of absence but which did not pay unemployment insurance, due to the absence of claims filed against them.

Group 3: Districts which terminated professional staff or placed them on unrequested leave of absence and which paid unemployment insurance only to individuals who were not rehired.

Group 4: Districts which terminated professional staff or placed them on unrequested leave of absence and which paid unemployment insurance to staff who were rehired as well as to those who were not.

This analysis focuses on districts classified as belonging to Group 4. The Appendix contains a listing of the school districts falling into each of the four classifications.

While this report is concerned with unemployment insurance payments to professional staff, it is nonetheless interesting to profile the overall patterns of layoffs and reemployment in the school districts studied. As Table 16 reveals, districts which terminated professional staff rehired a substantial proportion for the following fall.

TABLE 16

LAYOFFS AND REEMPLOYMENT OF PROFESSIONAL STAFF IN THE SCHOOL DISTRICTS STUDIED JUNE — SEPTEMBER, 1977

Type & Number of Districts	Number Laid Off	Number Rehired	Percent
Group 1: No Layoffs			
16 districts	0	0	0
Group 2: Layoffs and Rehires; No employment Insurance			
5 districts	28	16	57%
Group 3: Layoffs and Rehires; Unemployment Insurance Only to Staff Not Reemployed			
10 districts	240	87	36%
Group 4: Layoffs and Rehires; Unemployment Insurance to Staff Reemployed as Well as to Staff Not Reemployed			
20 districts	1,207	729	60%
TOTAL: ALL DISTRICTS			
51 districts	1,475	832	56%

In all, 56 percent of all professional staff laid off in the spring of 1977 were rehired by September 1. Given current state law, it was inevitable that some of these staff would receive unemployment insurance during their period of layoff. It is, however, interesting to note that a minority of persons eligible to file claims for compensation actually did. The next section of this report will explore this phenomenon.

Number of Recipients

By June of 1977, 1,475 professional staff had been terminated or placed on unrequested leave of absence by school districts in the Twin Cities metropolitan area, Rochester and Duluth. Although it may be assumed that most of these individuals were

EXHIBIT 7

TERMINATED PROFESSIONAL STAFF WHO WERE REEMPLOYED AS A PROPORTION OF ALL TERMINATED STAFF.

JUNE - SEPTEMBER, 1977

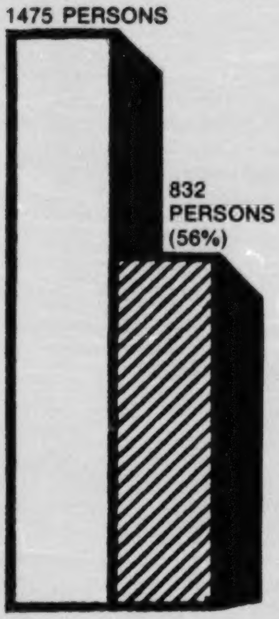
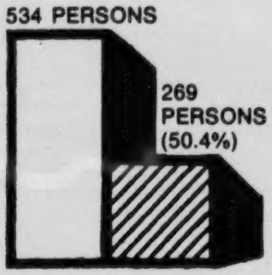


EXHIBIT 8

REEMPLOYED PROFESSIONAL STAFF WHO RECEIVED UNEMPLOYMENT INSURANCE AS A PROPORTION OF ALL UNEMPLOYMENT INSURANCE RECIPIENTS.

JUNE - SEPTEMBER, 1977



☐ ALL TERMINATED PROFESSIONAL STAFF
▨ TERMINATED PROFESSIONAL STAFF WHO WERE REEMPLOYED

eligible to receive unemployment insurance, only 534 persons (36%) actually collected benefits.

Of the original pool of layoffs, 832 persons (56%) were rehired by the same district for the 1977-78 school year. Two hundred sixty nine persons (32%) of all such "rehires" received unemployment insurance. These 269 persons accounted for 50.4 percent of all unemployment insurance recipients (534 persons) during the summer of 1977 in the school districts studied. (Exhibits Seven and Eight summarize).

Recipients by School Districts

Table 17 profiles unemployment insurance recipients who were terminated in the school districts studied. Overall, 534 (36%) of professional staff filed for and received unemployment insurance. Thirty of the 51 districts (67%) were involved. Persons collecting unemployment insurance who were reemployed by fall accounted for 50.4 percent of all recipients; this occurred in twenty districts.

Sixteen districts (31%) reported no terminations of professional staff. Because no professional staff were laid off, no resulting unemployment insurance costs were incurred.

Five districts (10%) terminated professional staff but had no unemployment insurance claims filed against them. Districts in this category typically rehired most of the persons originally laid off. (It should be noted that layoffs were not large and ranged from 2 to 16 persons.)

Ten districts (20%) incurred unemployment insurance costs only for professional staff who were laid off and not rehired. Although these districts reemployed individuals from the pool of terminated staff, they did not pay unemployment insurance to anyone who was subsequently rehired. On the average, districts in this group rehired 36 percent of all professional staff who were originally laid off. Variability among districts is evident, however, with the proportion of rehires to total terminations ranging from 0 (North St. Paul-Maplewood) to 69 percent

TABLE 17

UNEMPLOYMENT INSURANCE RECIPIENTS WHO WERE REEMPLOYED BY THE TERMINATING DISTRICT JUNE — SEPTEMBER, 1977

Type & Number of Districts	Number of UI Recipients	Number of UI Recipients who were Reemployed	Percent
Group 1: No Layoffs			
16 districts	0	0	0
Group 2: Layoffs and Rehires; No Unemployment Insurance			
5 districts	0	0	0
Group 3: Layoffs and Rehires; Unemployment Insurance Only to Staff Not Reemployed			
10 districts	39	0	0
Group 4: Layoffs and Rehires; Unemployment Insurance to Staff Reemployed as well as to Staff Not Reemployed			
20 districts	495	269	54%
TOTAL: ALL DISTRICTS			
51 districts	534	269	50.4%

TABLE 18

UNEMPLOYMENT INSURANCE RECIPIENTS WHO WERE REEMPLOYED IN THE TERMINATING DISTRICT BY SEPTEMBER, 1977

District	Number UI Recipients	UI Recipients Who Were Rehired	Percent
Duluth #709	44	44	100%
Brooklyn Center #286	3	3	100%
Robbinsdale #281	59	51	86%
St. Paul #625	68	56	82%
Mounds View #621	21	17	81%
Shakopee #720	3	2	67%
St. Anthony-New Brighton #232	8	4	50%
Hastings #200	2	1	50%
Chaska #112	2	1	50%
White Bear Lake #624	33	16	48%
St. Louis Park #283	51	24	47%
Anoka-Hennepin #11	28	10	36%
Bloomington #271	23	8	35%
Edina #273	7	2	29%
Centennial #12	4	1	25%
Rochester #535	75	18	24%
South St. Paul #6	13	3	23%
Hopkins #274	30	5	17%
South Washington #833	12	2	17%
Watertown-Mayer #111	1	1	11%
TOTALS	495	269	54%

(Columbia Heights). Six of the ten districts, however, rehired between 40 and 50 percent of the layoff pool.

Twenty districts (39%) paid unemployment insurance to professional staff who were rehired for the subsequent school year as well as to those persons who were not reemployed. These districts are the focus of this analysis. Table 18 shows the number of unemployment insurance recipients who were rehired in these districts by the fall of 1977.

In all, 495 professional staff in these 20 districts received unemployment insurance during the period studied; 269 (54%) of these persons were rehired. More than half of the districts (11 of 20) reemployed 47 percent or more of professional staff to whom they paid unemployment benefits; five districts reemployed over 80 percent of unemployment insurance recipients.

Amounts Paid by School Districts

Overall, $601,397 was paid in unemployment benefits to terminated professional staff; 45 percent of this amount ($273,264) was paid to staff who were rehired. Claims were filed against 30 of the 51 districts under study. Table 19 summarizes.

Unemployment insurance costs to the districts ranged from $656 in Inver Grove Heights-Pine Bend to $82,530 in Robbinsdale. These differences were primarily due to variations in the number of persons receiving benefits and the differing durations of benefits.

TABLE 19

UNEMPLOYMENT INSURANCE PAID TO TERMINATED PROFESSIONAL STAFF BY SCHOOL DISTRICTS STUDIED JUNE — DECEMBER, 1977

Type & Number of Districts	Total Amount of UI Paid	Amount Paid to Reemployed Staff	Percent
Group 1: No Layoffs			
16 districts	0	10	0
Group 2: Layoffs and Rehires; No Unemployment Insurance			
5 districts	0	0	0
Group 3: Layoffs and Rehires; Unemployment Insurance Only to Staff Not Reemployed			
10 districts	$ 54,058	0	0
Group 4: Layoffs and Rehires; Unemployment Insurance to Staff Reemployed as well as to Staff Not Reemployed			
20 districts	$547,339	$273,264	49.9%
TOTAL: ALL DISTRICTS			
51 districts	$601,397	$273,264	45%

The focus of this analysis, however, is on those 20 districts which incurred costs for unemployment insurance for professional staff whom they rehired. Payments in these districts to reemployed staff totalled $273,264; this represented 49.9 percent of all unemployment insurance payments to professional staff. Table 20 depicts the amounts paid to claimants who were rehired as compared with all unemployment insurance payments to professional staff in these districts.

Fourteen of the twenty districts paid out more than $10,000 in unemployment insurance to terminated professional staff; eight incurred costs in excess of $25,000. Payments by Rochester, Robbinsdale and St. Paul were by far the highest. These districts also had the greatest number of claimants (75, 59 and 68 respectively).

All unemployment insurance recipients in Duluth and Brooklyn Center were rehired, although the dollar cost to Duluth was much higher ($47,093) than that in Brooklyn Center ($3,145). Amounts in excess of $10,000 were incurred in seven districts for reemployed staff; Duluth, Robbinsdale and St. Paul showed costs in excess of $47,000.

On the average, a professional staff person who was terminated and reemployed collected $1,016 in unemployment insurance benefits.

School districts participating in this study report escalating unemployment insurance costs. In some cases, this is due to increases in staff layoffs. In other cases, it can be attributed to the higher proportion of eligible staff who file claims.

While massive spring layoffs continue in many districts, so do subsequent rehirings. It is difficult to monitor and routinely report the exact number of reemployed staff who receive unemployment insurance due to: (1) the lag time in billings to school districts by the Minnesota Department of Economic Security; and (2) the complexity of cross-referencing rosters of benefit recipients with lists of terminated staff. It may, however, be an area for future concern.

Unemployment insurance is intended to protect workers who qualify against uncertainties of irregular income. The findings of this study indicate that the behavior of public school employees who are laid off in using wage credits to file claims against their former employers is consistent with the provisions of the Employment Services Law.

TABLE 20

UNEMPLOYMENT INSURANCE PAYMENTS TO PROFESSIONAL STAFF WHO WERE REHIRED AS A PERCENT OF TOTAL PAYMENTS MAY TO SEPTEMBER, 1977

District	Total Amount UI Paid	Amount Paid to Rehired Staff	Percent of Total
Duluth #709	$ 47,093	$ 47,093	100%
Brooklyn Center #286	3,145	3,145	100%
South Washington #833	16,140	1,445	89%
Mounds View #621	18,610	14,006	87%
Robbinsdale #281	82,530	71,339	86%
St. Paul #625	66,894	54,378	81%
Hastings #200	1,977	701	71%
Shakopee #720	3,616	2,034	56%
White Bear Lake #624	34,950	16,026	46%
St. Louis Park #283	38,985	15,920	41%
Anoka-Hennepin #11	19,910	7,407	37%
Bloomington #271	25,879	9,232	36%
Chaska #112	1,921	565	29%
Edina #273	10,765	2,708	25%
South St. Paul #6	20,443	4,294	21%
St. Anthony-New Brighton #282	8,199	1,560	19%
Hopkins #274	34,220	5,565	16%
Rochester #535	92,023	14,169	15%
Centennial #12	4,495	420	9%
Watertown-Mayer #111	15,544	1,257	8%
TOTALS	$547,339	$273,264	49.9%

However, two recent changes in state law should enable school districts to better manage the difficult and sensitive areas of staff layoffs and recall and thereby reduce the amount of money expended for unemployment insurance. These legislative revisions are:

1. The extension in 1977 of the deadline for staff notification of involuntary terminations and unrequested leave to June 1 (from April 1). This enables districts to better anticipate their revenues, enrollments, and staffing needs.
2. The 1978 modification of the Minnesota Employment Services Law to define "reasonable assurance" of employment as an implied, verbal, or written agreement between the school district and an individual rather than a signed contract only.

Chapter Footnotes

[1] Normally, the base period is the 52 weeks prior to filing a new claim for benefits. However, it can be lengthened if worker's compensation was received.

[2] If a person has earnings while claiming weeks of unemployment, any amount over the deductible of $25 would reduce their weekly amount. However, the total amount available to the claimant would not be reduced.

[3] After January 1, 1978, political subdivisions have the option of electing coverage in the contribution tax system as do employers in private industry.

[4] School districts in Regions 3, 10 and 11 reported 73 percent of all staff layoffs in 1977, or 476 persons.

MAJOR FINDINGS ON THE EMPLOYMENT STATUS CHANGES OF EDUCATORS VOLUNTARILY LEAVING EDUCATION OR TERMINATED DUE TO INVOLUNTARY STAFF REDUCTION

This study describes and compares the demographic characteristics and employment experiences of: (1) educators who voluntarily left education for other employment in 1977; and (2) educators who were involuntarily terminated due to staff reductions in the spring of 1977 and were not rehired in any public school district as of October 1, 1977.

This report is based on results from survey questionnaires mailed to all educators with obtainable addresses who were reported by the Minnesota Department of Education as having voluntarily "Left the Education Profession" for other employment or were involuntarily "Terminated Due to Staff Reductions" in 1977.

Major questions addressed by the study include:

1. What were the characteristics of educators voluntarily leaving public schools for other occupations and how do they differ from those educators involuntarily terminated due to staff reduction?
2. How well did these educators find other employment opportunities? What is the average length of unemployment for each group? What were the salary differences?
3. How well do the displaced educators like their new jobs?

RESEARCH DESIGN AND CHARACTERISTICS OF THE SAMPLE

For purposes of this study, reasons for termination of contract by professional staff are classified as "voluntary" or "involuntary." Classification is based on the degree to which educators were perceived to have control over the decision to terminate their 1976-77 education positions.

Professional staff employed in Minnesota public school districts are assigned termination codes according to guidelines established by the Teacher Licensing and Placement Division, Minnesota Department of Education. Coding is accomplished at the local district level and is included in an "October 1 Report" to the Department of Education. Table 21 depicts all terminations of professional contracts by reason reported between October 2, 1976 and October 1, 1977.

Educators selected for inclusion in this study represent two subsets of all terminations:

1. Involuntary: Staff Reduction
2. Voluntary: Left Education Occupation

The original "Involuntary: Staff Reduction" group of 664 was reduced to include only those 501 individuals who were not reported as rehired by any public school district as of October 1, 1977. Addresses of those individuals included in each respondent group were requested from the 1976-77 school district of employment.

TABLE 21

PROFESSIONAL STAFF: TERMINATION OF CONTRACT BY REASON — OCTOBER 1, 1977

Involuntary Reasons	**Number**	**Percent**
Retirement	754	16.8
Death	68	1.5
Illness	56	1.3
Spouse Transferred	288	6.4
Not Re-employed	254	5.7
Staff Reduction	664	14.8
Subtotal: Involuntary	2,084	46.5
Voluntary Reasons		
Marriage	115	2.6
Maternity	122	2.7
Return to Homemaking	502	11.2
Travel	10	0.2
Personal Reasons	320	7.1
Other Education Occupation	104	2.3
Professional Growth	171	3.8
Military Service	2	0
Left Education Occupation	829	18.5
Subtotal: Voluntary	2,175	48.4
Unknown Reasons	227	5.1
TOTALS	4,486	100.0

EXHIBIT 9

AGE CHARACTERISTICS OF RESPONDENTS
AND TOTAL POPULATION 1977

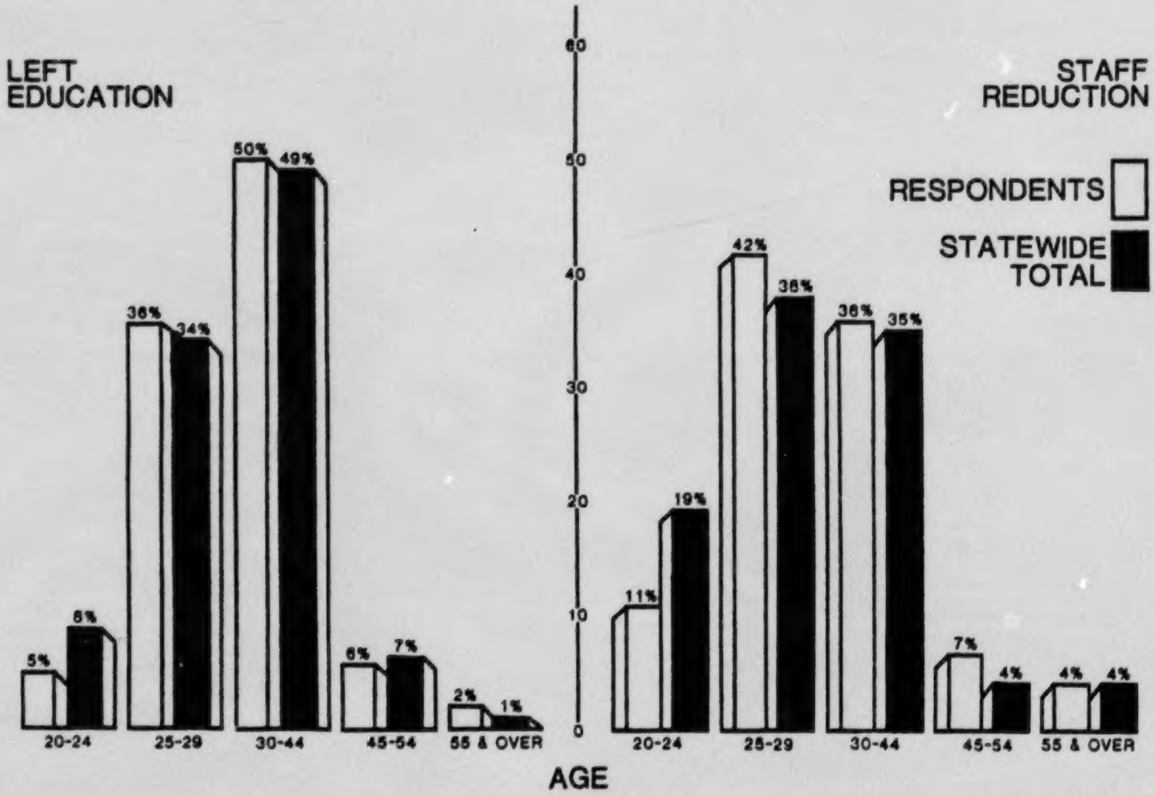


Table 22 summarizes the sample sizes and return rate.

A comparison between each respondent group and its total population on the variable of age indicates that the sample drawn is representative on a statewide basis. Exhibit Nine depicts the relationship between respondents and the total pool on the characteristic of age.

SUMMARY OF FINDINGS

The profile of educators who voluntarily left their profession for other employment in 1977 emerging from the data varies significantly from that of an educator displaced in the same year due to staff reduction. In brief, a person who voluntarily left education for other employment in 1977 was likely to be male, a primary wage earner, employed at the secondary school level, and experienced in jobs outside of education. This person's job search tended to be briefer, his new salary higher, his job satisfaction greater, and his occupational versatility more pronounced than that for persons who were involuntarily terminated. By contrast, a person displaced from education in 1977 due to staff reduction tended to be a female supplementary wage earner whose job change experience was less successful (*i.e.*, longer job search, lower wages, less job satisfaction).

Demographic Variables

Sex

As Table 23 depicts, respondents who left education voluntarily were more than twice as likely to be male: men accounted for 70.4 percent of that group. Conversely, 72.6 percent of all respondents who

TABLE 22

Summary of Respondent Groups

	Voluntarily Left Education	Staff Reduction
Statewide Total	798 *	501 **
Questionnaires Sent	582 (62.9%)	427 (85.2%)
Questionnaires Delivered	537 (67.3%)	390 (77.8%)
Questionnaires Returned	261	215
Return Rate (Base = Number Delivered)	48.6%	55.1%

* Statewide totals are not identical with those shown in Table 21 due to inconsistencies in reporting by local districts. The figure used in this study represents only those professional staff who actually left education for other employment.

** Discrepancy with Table 21 is explained above.

TABLE 23

SEX OF RESPONDENTS BY REASON FOR LEAVING EDUCATION, 1977

	Male	Female	Total
Left Education	70.4%	29.6%	**100%**
Staff Reduction	27.4%	72.6%	**100%**

TABLE 24

STATUS OF RESPONDENTS AS PRIMARY WAGE EARNER BY REASON FOR LEAVING EDUCATION

Primary Wage Earner	Left Education	Staff Reduction
Yes	82.7%	49.5%
No	17.3%	50.5%
	100.0%	100.0%

were involuntarily terminated were women, due primarily to the high proportion of layoffs at the elementary instructional level where females predominate.

These sex differences are consistent with other studies of labor force mobility. Sommers and Eck (1977) found that about twice as many men (40%) as women (26%) chose to change occupations. These researchers postulate that there are fewer alternative occupations into which women can move. Hence, the range of earnings for women is much narrower and their incentives for movement fewer. In studying teachers specifically, Lortie (1975) asserts that men have higher career aspirations than women because females view their careers as contingent on and supplementary to those of a husband.

These data indicate that women are less likely than men to voluntarily change careers, regardless of external forces.

Wage Earner Status

There is significant difference between the two respondent groups with respect to the individual's status as the primary wage earner in his or her family. Respondents who voluntarily left their profession were almost five times more likely to be the primary wage earner. On the other hand, there is an almost even division among staff reduction respondents on the same variable. Table 24 summarizes.

Marital Status

While no significant differences were found between the two groups in terms of marital status, over three-quarters of respondents were married (Left Education: 77.6%; Staff Reduction: 75%).

Age

The average age for respondents involuntarily terminated was 31.99 years and 32.88 years for those who left voluntarily. No significant differences between the two groups were found.

Training

Although no significant differences in training were found to exist between the two groups, twice as many respondents voluntarily leaving their profession held Master's degrees. A majority (73%) of educators studied, however, had not earned post-baccalaureate degrees.

Past Employment Variables

Job Experience in Education

Respondents affected by staff reductions tended to have less accumulated experience in education than those who left the profession voluntarily. The average number of years of experience for respondents leaving voluntarily was 4.96 years; persons involuntarily terminated had logged an average of 3.23 years.

Education Assignment Area

A significant difference between the two respondent groups exists on the job assignment variable. Persons leaving education voluntarily tended to come from secondary instructional areas (77.6%), while the assignments of persons in the staff reduction group were more evenly distributed. Table 25 profiles the 1976-77 job assignments of respondents.

TABLE 25

ASSIGNMENT AREA OF RESPONDENTS' 1976-77 EDUCATION POSITION

Assignment	Left Education	Staff Reduction
Elementary Instructional	14.8%	43.0%
Secondary Instructional	77.6%	51.2%
Pupil Personnel	3.8%	4.3%
Administration	3.8%	1.5%
	100.0%	100.0%

TABLE 26

MEAN NUMBER OF JOBS HELD BY RESPONDENTS PRIOR TO 1976-77

	In Education	Outside Education	Total
Left Education	2.25	5.04	7.24
Staff Reduction	3.05	4.25	7.17

TABLE 27

EMPLOYMENT STATUS OF RESPONDENTS AS OF JULY, 1978

Employment Status	Left Education	Staff Reduction
Full-time Work	79.8%	54.8%
Part-time Work	9.7%	26.7%
TOTAL EMPLOYED	89.5%	81.5%
Not Yet Employed	1.9%	9.5%
Did Not Seek Employment	8.6%	9.0%
	100.0%	100.0%

Many of the persons who voluntarily left education for other employment were in technical fields such as Science, Agriculture, Math, and Trades and Industry. This finding points to the greater flexibility of educators with portable skills which have job market demand.

Past Job Market Experience

Significantly, respondents who voluntarily left education had held twice as many jobs outside of education than within education. On the other hand, the total number of jobs held by respondents did not indicate any significant difference between the two groups. Therefore, it is likely that past job change from one field to another is a good predictor of continuing occupational mobility. Table 26 summarizes.

Employment Status Change Variables

Employment Status as of July 1, 1978

July 1, 1978 (one year after termination), 94 percent of all respondents looking for work were employed, as shown in Table 27. However, more educators who left the profession voluntarily had found work by this date: 89.5 percent compared with 81.5 percent of the staff reduction group. In addition, 27 percent of the educators who left involuntarily accepted part-time employment, compared with 10 percent of respondents in the other group.

Duration of Job Search

Educators who voluntarily left the profession obtained employment in less time than did those affected by staff reductions. The time spent jobless (once respondents began seeking work) averaged 1.59 months for the voluntary quit group and 3.63 months for staff terminated involuntarily. This constitutes a significant difference. Further, while almost 90 percent of respondents leaving education voluntarily had found work within four months, the figure for other respondents did not reach the 90 percent employment level until 8 months had elapsed. Part of this difference is likely due to the fact that many persons leaving voluntarily had new jobs lined up prior to submitting their resignations.

Salary Comparisons

Respondents were asked to compare the annual salary in their new job with their 1976-77 education salary. As Table 28 reveals, respondents who voluntarily left education were able to find better paying jobs than their counterparts: 51 percent reported salary increases of $500 to $4500. Conversely, 55 percent of respondents in the staff reduction group were earning $500-$4500 less in their new positions. It is interesting to note that proportionately few respondents reported horizontal salary moves wherein the pay differential was $500 more or less.

Type of Job Obtained

An explanation for the salary differences profiled in Table 28 is offered by a sketch of the new jobs obtained by respondents (Table 29).

As Table 29 shows, 46 percent of respondents in the staff reduction group stayed in teaching (many part-time), while almost 15 percent were working in clerical jobs. Only 30 percent found non-teaching

TABLE 28
RESPONDENTS' CURRENT ANNUAL SALARY COMPARED WITH THAT OF 1976-77 EDUCATION POSITION BY REASON FOR LEAVING PROFESSION

Salary Comparison	Left Education		Staff Reduction	
Over $4501 Less	14.5%	34.7%	23.2%	54.9%
$3001 - $4500 Less	8.8%		6.5%	
$1501 - $3000 Less	6.6%		14.2%	
$501 - $1500 Less	4.8%		11.0%	
Within $500 More or Less	14.0%	14.0%	17.4%	17.4%
$501 - $1500 More	7.0%	51.3%	7.7%	27.7%
$1501 - $3000 More	9.6%		6.5%	
$3001 - $4500 More	7.5%		4.5%	
Over $4500 More	27.2%		9.0%	
	100.0%		100.0%	

TABLE 29
RESPONDENTS' CURRENT OCCUPATIONAL TITLE BY REASON FOR LEAVING PROFESSION, 1977-78

Occupational Title	Left Education	Staff Reduction
Professional/Techincal		
Teaching	6.3%	45.7%
Non-teaching	21.5%	15.2%
Management, Administration	19.3%	7.3%
Sales	25.6%	7.9%
Clerical	7.6%	14.6%
Craft/Trade	6.8%	2.0%
Operative	2.2%	0.7%
Laborer/Farm	5.3%	2.7%
Service Work	2.7%	2.6%
Self-Employed	2.7%	1.3%
	100.0%	100.0%

TABLE 30
RESPONDENTS' SATISFACTION WITH CURRENT OCCUPATION COMPARED WITH 1976-77 EDUCATION POSITION BY REASON FOR LEAVING PROFESSION

How Well Like New Job	Left Education	Staff Reduction
Much Better	54.0%	23.4%
Somewhat Better	22.6%	18.3%
About Same	11.9%	19.0%
Somewhat Less	6.2%	19.0%
Much Less	5.3%	20.3%
TOTAL	100.0%	100.0

jobs in professional, management, or sales fields. On the other hand, 66 percent of respondents leaving voluntarily were employed in non-teaching professional, managerial, or sales jobs. Within the sales classification, jobs in insurance and real estate were particularly popular. (See Table 73 in the Appendix for a complete listing). In fact, only 6 percent of respondents who voluntarily left education stayed in teaching.

Respondents leaving voluntarily, then, displayed much more versatility in their occupational moves, while the job titles of respondents in the staff reduction group indicate underemployment.

Job Satisfaction

Respondents who left education voluntarily tended to be more pleased with their new jobs than with their former positions: 77 percent reported that they liked their current job better. Responses of respondents in the staff reduction group were more evenly distributed: 42 percent liked their new job better; 39 percent liked their new job less. Table 30 summarizes.

Commitment to Public School Education as a Profession

Significant differences exist between the two groups of respondents concerning their willingness to return to the education profession. When asked if they would go back to a job in a public school if given the opportunity, respondents who had voluntarily left were twice as likely to answer in the negative (66% as compared with 33% in the staff reduction group). On the other hand, 67 percent of respondents affected by staff reductions reported a desire to re-enter public school education.

Job Search Activities

Although data was gathered on the job search activities of respondents (e.g., participation in career planning seminars, use of placement bureaus, involvement in counseling), the large number of missing observations rendered analysis difficult. Therefore, these variables will not be addressed.

SUMMARY COMMENTS

Minnesota is witnessing annual increases in the number of persons voluntarily leaving education for other employment. In 1973, 604 professional staff left education for other careers; by 1978, 966 persons voluntarily changed careers. This represents a 60 percent increase over the six-year period. In fact, voluntary career change terminations significantly outnumber involuntary terminations due to staff reductions.

These voluntary quits are undoubtedly due in part to the increasing threat of job insecurity, but are also evidence that teaching is a "bridge" occupation and that educators possess generic skills applicable in a variety of work settings. School personnel administrators report the increased use of long-term leaves of absence, particularly the Extended Leave of Absence as passed by the Minnesota Legislature in 1977 and amended in 1978 (Minnesota Statutes of 1978, 125.60). The extended leave program enables experienced educators (excluding superintendents) to apply for a three to five year leave of absence in order to investigate a new occupation without foregoing retirement benefits and tenure rights. These same administrators report that individuals taking advantage of these leaves are primarily men in their thirties; this is consistent with the profile of respondents in this study who voluntarily left education in 1977. Whether this indicates an outmigration of highly motivated "self-starters" is an issue which cannot be addressed with the data currently available.

While the successful occupational moves of educators voluntarily leaving their profession are laudatory, the underemployment of women displaced from education is cause for concern. Although their marginal job market status may be due to a perceived supplemental earning status, many women reported that they were unhappy in their new jobs but unable to find anything else.

These individuals may represent a "head in the sand mentality" and be psychologically unprepared for job loss. In addition, career planning professionals report that educators are both unfamiliar with the job market outside of education and unaware of their saleable skills and talents. The *Wall Street Journal* reports that workers who are both laid *off* and receiving unemployment insurance spend less time in job search activities than any other group. This necessarily lengthens their jobless period. For these and other psychological and economic reasons, special efforts to assist displaced educators in obtaining alternative positions may be needed. One such effort, entitled "Job Change Services for Unemployment Educators", is a pilot project designed and established by the State Planning Agency and the Educational Cooperative Service Unit of the Twin Cities Metropolitan Area. It is currently being evaluated by the two founding agencies; findings are forthcoming.

Cost savings to local districts accrue when high-salaried staff leave their positions and are replaced with lower-cost staff (or in some cases, not replaced at all). On the other hand, district costs for unemployment insurance escalate annually. They will be driven by the number of layoffs as well as by the duration of the joblessness of former employees. These economic concerns do not address issues of quality arising from changes in staff characteristics. Therefore, careful monitoring of the trends in the education cadre will be important in future considerations of policy intervention.

References Cited

Lortie, Dan C. Schoolteacher. Chicago: University of Chicago Press, 1975.

Sommers, D. and Eck, A. "Occupational Mobility in the American Labor Force," *Monthly Labor Review, 3:* (25), January, 1977.

Wall Street Journal, January 16, 1979.

MAJOR FINDINGS ON THE CHARACTERISTICS OF NEWLY HIRED STAFF

This study summarizes the changes over time in the job assignments and demographic characteristics of newly hired professional staff.

Analysis is based on data reported by local school districts to the Minnesota Department of Education. Except where otherwise stated, information on newly hired personnel is computed in terms of Full-Time Equivalent (FTE) staff and does not include postsecondary vocational assignment areas. An educational professional reported by a local district as "new staff" is new to that district; persons affected by internal transfers within a district are excluded from the definition. A complete list of definitions is contained in Appendix A.

Overview

The five-year period 1973-74 to 1977-78 reflects growth followed by shrinkage in the number of newly hired professional public school personnel in Minnesota. This is consistent with statewide trends in the education cadre as a whole.

As Table 31 depicts, the total number of newly hired FTE staff grew slightly from 4,968 in 1973-74 to a peak of 5,020 in 1975-76 (52 FTE staff). Thereafter, decline began not only to occur, but to accelerate; the decrease of 216 FTE new hires[1] between 1976-77 and 1977-78 was double the decline the preceding year. Overall, a 5.4 percent decline is apparent, with 270 fewer FTE new hires in 1977-78 than in 1973-74.

Trends in the number of newly hired staff are generally consistent with changes over time in the total public school education cadre. As Exhibit Ten depicts, however, the decline in newly hired staff has been greater since 1975-76 than that in the education cadre as a whole. Between 1976-77 and 1977-78, a shrinkage of 4.4 percent in new hires was apparent, compared with a decrease of 1.4 percent in the total cadre for the same period.

Another way of studying the relationship between new hires and total staff is to examine the proportion of the education cadre who are newly hired each year. Since 1973-74, the proportion of total FTE staff who are newly hired has remained constant at somewhat over 9 percent (Table 32).

However, if Special Education is removed, the proportion of the total cadre represented by newly hired personnel exhibits a gradual but steady decline of 1.2 percent from 1973-74 to 1977-78. This is summarized in Table 33. A later section of this chapter will examine this and related phenomenon in greater detail.

TABLE 31

NEW HIRED FTE PROFESSIONAL STAFF IN MINNESOTA PUBLIC SCHOOLS 1973-74 TO 1977-78

	Number FTE New Hires	FTE Change	Percent Change
1973-74	4,968.38	—	—
1974-75	4,979.98	+ 11.60	+0.2%
1975-76	5,019.81	+ 39.83	+0.8%
1976-77	4,913.85	-105.96	-2.1%
1977-78	4,698.21	-215.64	-4.4%
TOTAL		-270.17	-5.4%

TABLE 32

PROPORTION OF TOTAL FTE STAFF REPRESENTED BY NEW HIRES 1973-74 TO 1977-78

	Total FTE Staff	New Hires	Percent
1973-74	50,720.79	4,968.38	9.8%
1974-75	50,743.57	4,979.98	9.8%
1975-76	51,528.83	5,019.81	9.7%
1976-77	51,347.73	4,913.85	9.6%
1977-78	50,640.00	4,698.21	9.3%

TABLE 33

PROPORTION OF FTE NEW HIRES TO TOTAL STAFF, EXCLUDING SPECIAL EDUCATION 1973-74 TO 1977-78

	Total FTE Staff	New Hires	Percent
1973-74	47,726.96	4,372.45	9.2%
1974-75	47,449.05	4,377.60	9.2%
1975-76	47,740.30	4,199.23	8.8%
1976-77	46,971.62	3,970.49	8.5%
1977-78	45,843.80	3,680.51	8.0%

EXHIBIT 10

ANNUAL PERCENT CHANGES IN NEWLY HIRED STAFF, AND THE TOTAL EDUCATION CADRE 1973-74 TO 1977-78

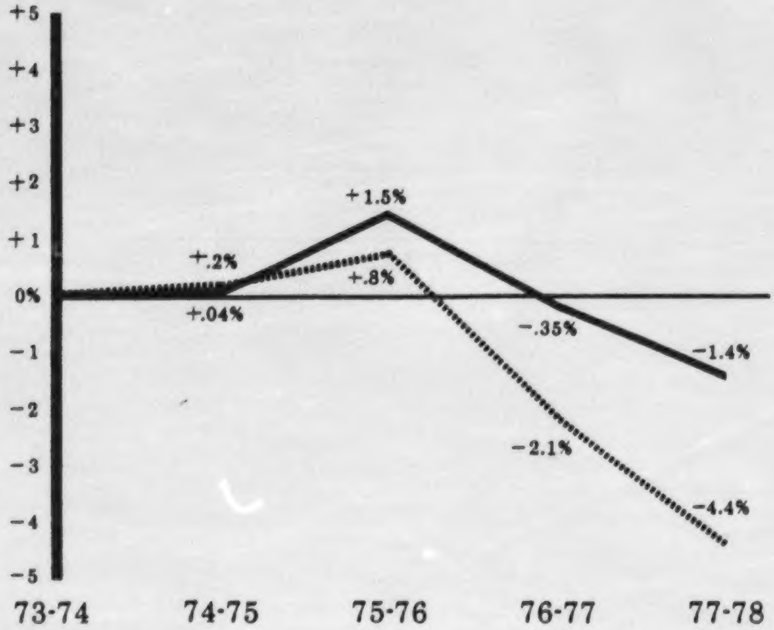


TABLE 34

PROPORTION OF FTE NEW HIRES TO TOTAL STAFF BY DISTRICT SIZE 1973-74 TO 1977-78*

Year	0-299	300-799	800-1799	Over 10	First Class Cities
1973-74					
Number (New Hires: Total Staff)	161:828	734:5,555	1,157:8,490	2,528:28,139	388:7,170
Percent	19.4%	13.2%	13.2%	8.9%	5.4%
1974-75					
Number	254:1,178	856:5,496	1,008:8,573	2,402:28,305	317:6,837
Percent	21.6%	15.6%	11.8%	8.5%	4.6%
1975-76					
Number	348:1,273	809:5,675	985:8,774	2,439:28,606	312:6,786
Percent	27.3%	14.3%	11.2%	8.5%	4.6%
1976-77					
Number	300:1,416	767:5,750	969:8,538	2,434:28,728	299:6,424
Percent	21.2%	13.3%	11.4%	8.5%	4.6%
1977-78					
Number	277:1,511	708:5,436	980:8,681	2,184:28,195	399:6,299
Percent	18.3%	13.0%	11.3%	7.7%	6.3%
	-1.4%	- .2%	-1.9%	-1.2%	+ .9%

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*Excluding Vocational Centers & Special Education Co-ops

New Staff and District Size

School districts of different sizes vary in their hiring patterns. Succinctly stated, the smaller the school district, the greater the proportion of newly hired to total staff. Table 34 depicts this relationship for Minnesota school districts.

School districts enrolling fewer than 299 students had the highest proportion of FTE staff who were newly hired: 18 percent in 1977-78. By contrast, newly hired staff in the school districts of Minneapolis, St. Paul, and Duluth represented 6 percent of total professional personnel in 1977-78.

The proportion of newly hired personnel to total staff has, however, declined in most districts since 1973-74. The exception to this generalization occurred in Minneapolis, St. Paul, and Duluth which experienced a slight increase of .9 percent (11.4 FTE staff). The greatest decline in the proportion of total staff represented by newly hired persons in the five year period is exhibited in districts enrolling 800 to 1,799 students. New hires in these districts accounted for 11 percent of the professional staff in 1977-78 and 13 percent in 1973-74.

Part-time and Full-time Assignments

The number and proportion of newly hired personnel in part-time assignments[2] has increased 46.5 percent or 114 FTE staff since 1973-74 although the total number of new FTE staff has decreased. As Table 35 illustrates, the proportion of part-time new hires has risen steadily from 4.9 percent (245 FTE staff) in 1973-74 to 7.6 percent (359 FTE staff) in 1977-78.

TABLE 35

NEW HIRES: PART-TIME/FULL-TIME ASSIGNMENTS

	FTE Part-Time	Total FTE New Hires	%Part-Time
1973-74	245.37	4,968.38	4.9%
1974-75	264.84	4,979.98	5.3%
1975-76	281.60	5,019.81	5.6%
1976-77	342.17	4,913.85	6.9%
1977-78	359.37	4,698.21	7.6%
	+114.0	- 270.17	+2.7%

It has been speculated that a major influx of part-time personnel into Special Education assignments is occurring. Therefore, data was gathered which profiles the number (headcount) of part-time and full-time teachers in Special Education. As Table 36 reveals, a 72 percent growth in the number of part-time staff has occurred since 1973-74. However, in 1977-78, part-time staff still accounted for only 8 percent (115 persons) of all Special Education teachers in 1977-78. Therefore, while local districts are increasing their number of part-time staff in Special Education, the phenomenon is not yet significant enough to significantly influence the interpretation of data on all newly hired staff.

TABLE 36

HEADCOUNTS OF NEWLY HIRED STAFF WITH SPECIAL EDUCATION TEACHING ASSIGNMENTS*
1973-74 TO 1977-78

	Number Full-Time**	Number Part-Time***	Total
1973-74	1,345	67 (4.7%)	1,412
1974-75	1,279	63 (4.7%)	1,342
1975-76	1,272	92 (6.7%)	1,364
1976-77	1,283	99 (7.2%)	1,382
1977-78	1,308	115 (8.1%)	1,423

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* *i.e.*, Educable Mentally Retarded, Trainable Mentally Retarded, Speech Correction, Emotionally Disturbed and Socially Maladjusted, Learning Disabled, Orthopedically Handicapped, Hearing Impaired, Visually Handicapped.

** Represents any full-time (20 hours or more per week) professional staff person who is assigned to any Special Education class in the areas designated above.

*** Represents any part-time (19 or fewer hours per week) professional staff person who is assigned to any Special Education class in the areas designated above.

Growth in the number of newly hired part-time staff reflects decisions at the local level which may include:

1. The need for increased Special Education staff in specific areas.
2. The determination to cut back curriculum areas in which enrollment is declining.
3. The intent to reduce costs by limiting the number of staff covered by fringe benefits such as health insurance.
4. The desire to gain greater management flexibility by not increasing the number of tenured staff.

In addition, it may be speculated that the number of persons who are willing to accept part-time assignments is increasing, due to the lessening availability of full-time employment in education.

However, the increase in part-time staff could result in a pool of employees with limited investment in their school systems. Persons who are less than full-time employees have neither the same rights nor responsibilities of others. They are generally under no obligation to be available to students during the full school day, be present at after-school faculty meetings, accept extracurricular assignments, or attend evening meetings with parents. Rather, they are legally responsible to participate in only those school functions which are scheduled during the hours specified in their contracts. In that many part-time personnel desire full-time assignments, they are potentially mobile; turnover in part-time ranks may be expected to be higher than in full-time assignments. Therefore, growth in the pool of persons who may be "marginal employees" provides cause for further investigation. This is, however, outside the scope of this report.

Source of New Staff

The number of newly hired professional staff who have prior job experience in education has increased substantially since 1973-74. As Table 37 illustrates, local school districts are hiring fewer recent college graduates without job experience in education (coded "Initial Employment"), favoring instead persons returning to the profession after an absence of one or more years ("Returned to the Profession") or persons transferring from other districts.

Particularly striking is the growth in two categories: (1) persons transferring from one Minnesota school district to another (969 persons in 1973-74 to 1,462 in 1977-78); and (2) persons returning to the education profession (373 persons in 1973-74 to 657 in 1977-78). Conmitantly, the number of Minnesota residents without prior job experience in education—most of whom are assumed to be recent college graduates—has declined from 2,443 persons in 1973-74 (40%) to 1,804 in 1977-78 (26%).

As Exhibit Eleven depicts, all categories of new staff have increased or remained stable since 1973-74 with the exception of persons employed for the first time in education.

The proportion of professional staff transferring from one Minnesota school district to another has increased steadily during the five-year period. In 1973-74, 969 new staff persons were reported as transferring from another district; this category grew to 1,462 persons in 1977-78. In order to gain more insight into the factors contributing to movement by educators within this internal labor market, mobility

TABLE 37

SOURCE OF NEW CONTRACT STAFF*
1973-74 TO 1977-78

	1973-74	1974-75	1975-76	1976-77	1977-78
Initial Employment — Minnesota Resident	2,443 (39.7%)	2,397 (40.5%)	2,172 (34.9%)	1,993 34.6%)	1,804 (32.1%)
Initial Employment — Non Minnesota Resident	356 (5.8%)	271 (4.6%)	327 (5.2%)	365 (6.3%)	315 (5.6%)
Returned to Profession	373 (6.1%)	4 (8.1%)	632 (10.1%)	553 (9.6%)	657 (11.7%)
Transfer from Another State	423 (6.9%)	445 (7.5%)	452 (7.3%)	568 (9.8%)	486 (8.6%)
Transfer from Inside Minnesota	969 (15.7%)	1,190 (20.1%)	1,350 (21.7%)	1,398 (24.0%)	1,462 (26.0%)
Unknown**	1,589 (25.8%)	1,141 (20.2%)	1,293 (20.8%)	897 (15.7%)	897 (16.0%)
TOTAL	6,153 (100%)	5,924 (100%)	6,226 (100%)	5,764 (100%)	5,621 (100%)

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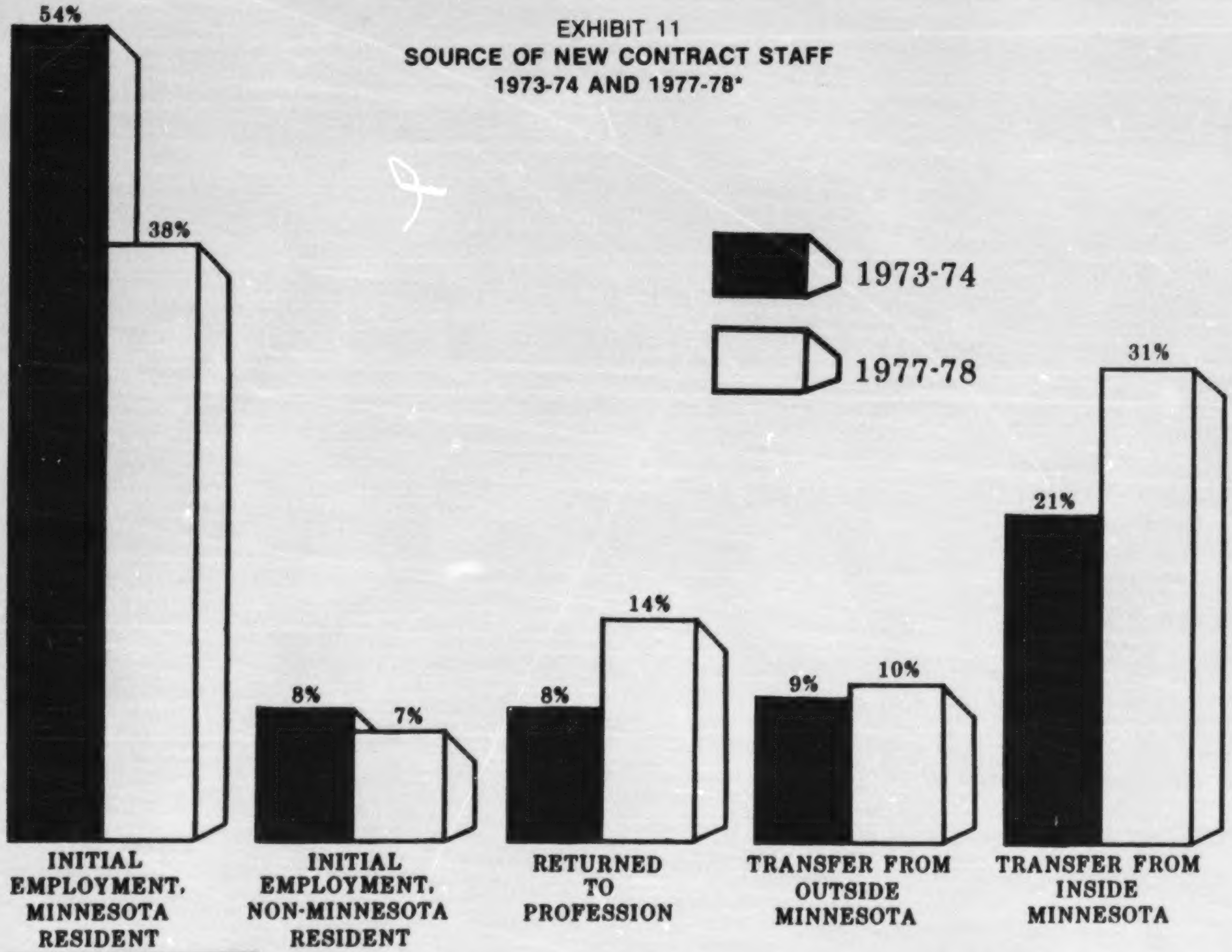
* Figures represent all persons reported as new staff by local school districts and include secondary vocational assignments.

** Most new staff classified as "unknown" are employed at Area Vocational-Technical Schools.

EXHIBIT 11

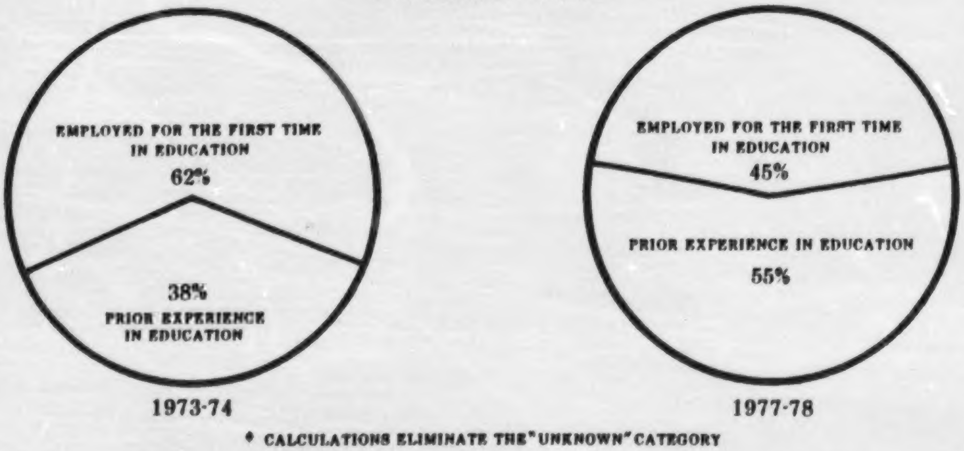
SOURCE OF NEW CONTRACT STAFF 1973-74 AND 1977-78*



* EXCLUDING "UNKNOWN" CATEGORY

EXHIBIT 12

EXPERIENCE LEVELS OF NEWLY HIRED STAFF* 1973-74 AND 1977-78



* CALCULATIONS ELIMINATE THE "UNKNOWN" CATEGORY

patterns and propensity will be examined in detail in a separate report.

The growth in the "Returned to the Profession" category (a 76% increase in the five-year period) signals an influx of experienced personnel who, for one reason or other, have been outside the public school ranks for one or more years.

Staff in this category include:

1. Persons who left jobs in education to pursue further study.
2. Persons who were terminated in one district and were unable to find employment in education for at least one full year.
3. Women who left education jobs to bear children or raise a family.
4. Persons with school experience who were employed in other careers and decided to return to education.

Spot checks indicate that a number of persons in this category accepted part-time or hourly contracts, particularly in Special Education. However, the exact extent of this phenomenon cannot be ascertained with existing data.

Exhibit Twelve compares the changes over time in the proportion of new staff who have prior job experience in education with those who have none. As indicated, the balance between the two groups has shifted rather dramatically.

Age of New Staff

Fewer young persons are being hired by Minnesota school districts. In 1973-74, 43 percent of all newly hired staff were 24 years of age or younger; by 1977-78, only 25 percent fit that classification. Just as the percentage of staff aged 30-44 in the total cadre is increasing (40% in 1973-74 to 48% in 1977-78), so is that among newly hired staff. In 1977-78, 29 percent of all new hires were between the ages of 30 and 44, compared with 20 percent in 1973-74. Exhibit Thirteen compares the ages of new staff in 1973-74 with 1977-78.

The increased age of newly hired staff is consistent with the growth in the number of persons with prior job experience in education. It also contributes to the general aging of the cadre as a whole as fewer recent college graduates find employment in public

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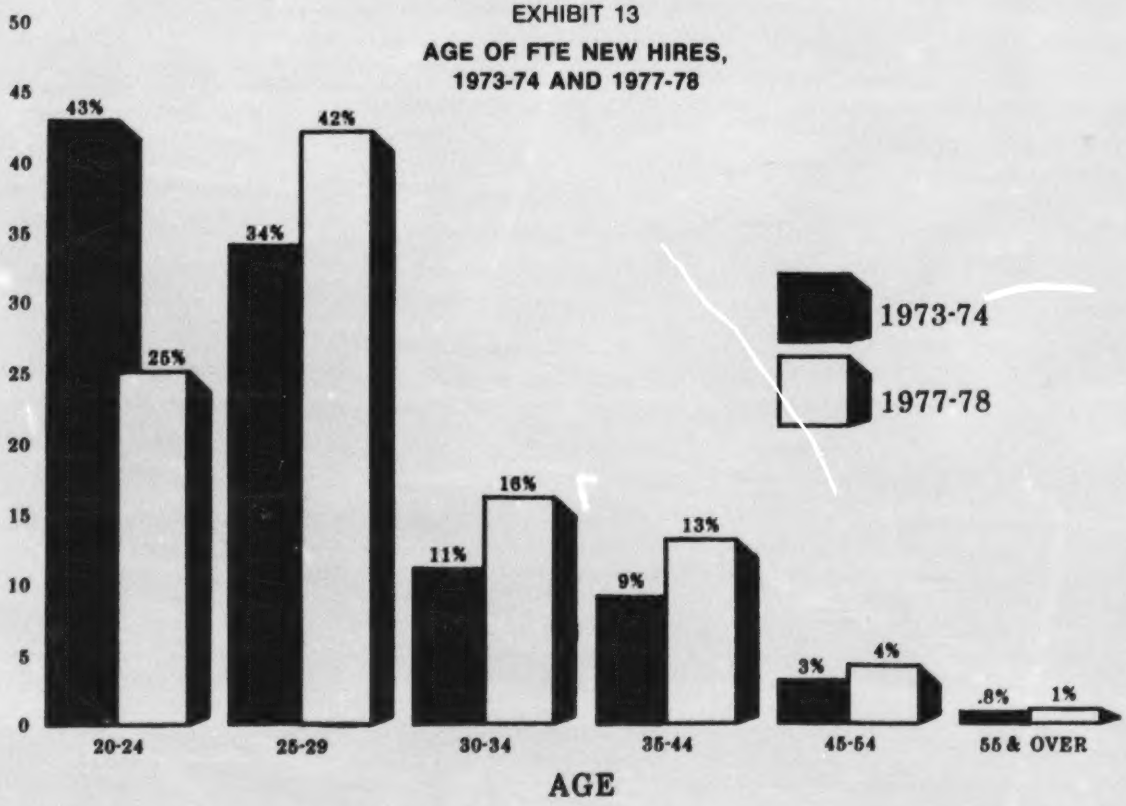

EXHIBIT 13

AGE OF FTE NEW HIRES, 1973-74 AND 1977-78

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schools. It may not be assumed, however, that older staff enter the salary schedule at advanced lanes, since the awarding of experience credits is based on locally negotiated guidelines. Future analysis should include an examination of staff positions (step/lane) on school district salary schedules.

Statewide trends are more pronounced in the Twin Cities metropolitan area (Region 11). As Table 38 reveals, the decline in new staff younger than age 24 has been more precipitous in the metro area than in the rest of Minnesota. In 1977-78, only 18 percent of new staff in the metro area were aged 20-24, compared with 30 percent in the balance of the state. Concomitantly, 62 percent of all new staff in the metro area in 1977-78 were between the ages of 25 and 34.

Sex of New Staff

TABLE 38

AGE OF FTE NEW HIRES IN THE TWIN CITIES METROPOLITAN AREA (REGION 11) AS COMPARED WITH THE BALANCE OF THE STATE 1973-74 AND 1977-78

Age Group & Year	Metro Area (Region 11) Percent of FTE New Hires	Balance of State Percent of FTE New Hires
Age 20-24		
1973-74	38.3%	45.3%
1977-78	18.2%	30.1%
Age 25-29		
1973-74	39.3%	30.5%
1977-78	44.1%	40.1%
Age 30-34		
1973-74	10.6%	10.9%
1977-78	18.0%	14.4%
Age 35-44		
1973-74	9.5%	8.9%
1977-78	14.5%	11.7%
Age 45-54		
1973-74	2.0%	3.3%
1977-78	4.3%	3.6%
Age 55 & Over		
1973-74	.3%	1.0%
1977-78	.9%	1.1%
	100.0%	100.0%

More women than men are being hired by Minnesota school districts. This has become more true with time. In 1977-78, 67 percent of all new staff were women, compared with 57 percent in 1973-74. This imbalance becomes more pronounced when new staff in full-time and part-time positions are compared.

As Table 39 illustrates, 80 percent of persons hired in part-time positions in 1977-78 were women. Indeed, while 114 additional FTE staff were hired on a part-time basis in 1977-78 as compared with 1973-74, 112 of these positions were filled by women. Sixty-six percent of FTE full-time positions in 1977-78 were staffed by women, an increase of 10 percent in five years.

TABLE 39

SEX OF FTE NEW HIRES IN FULL-TIME AND PART-TIME POSITIONS 1973-74 AND 1977-78

	Male	Percent Male	Female	Percent Female
Full-Time				
1973-74	2,069.6	43.8%	2,653.4	56.2%
1977-78	1,488.3	34.3%	2,850.5	65.7%
Part-Time				
1973-74	67.4	27.5%	177.9	72.5%
1977-78	69.9	19.5%	289.4	80.5%
TOTAL				
1973-74	2,137.0	43.1%	2,831.3	56.9%
1974-75	1,588.3	33.2%	3,139.9	66.8%

Training Levels of New Staff

There has been a modest increase statewide in the number of newly hired staff who hold advanced degrees. This is particularly true in the Twin Cities metropolitan area (Region 11), as Table 40 illustrates.

Increased proportions of new staff in the metro area hold advanced degrees. This is not true in the rest of Minnesota, in that the slight .4 percent increase in new staff with Specialist or Doctorate degrees is rendered negligible by a 1.3 percent decrease in Fifth Year and Master's degree holders.

However, over 80 percent of new staff hired in either area have not earned post-baccalaureate degrees, despite their advancing ages.

TABLE 40

TRAINING LEVELS OF NEW HIRES IN THE METROPOLITAN AREA (REGION 11) AND THE BALANCE OF THE STATE 1973-74 AND 1977-78

Degree and Year	Region 11		Balance of State	
	Number FTE	Percent	Number FTE	Percent
B.A.				
1973-74	1,516.0	(83.6%)	2,777.4	(87.1%)
1977-78	1,384.4	(80.1%)	2,613.1	(88.0%)
5 Year, Master's				
1973-74	268.9	(15.8%)	370.6	(11.7%)
1977-78	308.5	(17.9%)	308.7	(10.4%)
Specialist, Doctorate				
1973-74	28.3	(1.6%)	37.0	(1.2%)
1977-78	36.0	(2.1%)	47.6	(1.6%)

Experience Levels of New Staff

While over 90 percent of newly hired staff have ten or fewer years of job experience in education, increases in those persons with more experience have occurred. Once again, this is especially true in the Twin Cities metropolitan area.

As Table 41 depicts, the number of newly hired staff in the metro area with 11 or more years of experience has almost doubled since 1973-74, although these persons still comprised only 6 percent of total staff in 1977-78. On the other hand, while the number of these persons has remained fairly stable in non-metro districts, they have historically accounted for a slightly higher proportion (7%) of all new FTE staff.

It would be informative to break staff experience levels into finer cuts of five year intervals, in order to examine trends more closely. Any future monitoring efforts should include this consideration.

TABLE 41

EXPERIENCE LEVELS OF FTE NEW HIRES IN THE METROPOLITAN AREA AND THE BALANCE OF THE STATE 1973-74 AND 1977-78

Experience & Year	Region 11		Balance of State	
	Number FTE	Percent	Number FTE	Percent
0-10 Years				
1973-74	1,756.5	(96.9%)	2,945.7	(93.3%)
1977-78	1,622.3	(93.8%)	2,758.2	(92.9%)
11 & More Years				
1973-74	56.8	(3.4%)	209.3	(7.1%)
1977-78	106.5	(6.2%)	211.2	(7.1%)

Assignment Areas of New Staff

With the exception of Special Education and Other Administrators (e.g., business officers, personnel officers), all assignment areas manifest declines in the number of newly hired staff. This is consistent with trends in the total education cadre. On the whole, declining assignment areas have exhibited steady shrinkage in the number of new staff since 1973-74. Concomitantly, the two growth areas reflect annual increases over the five year period. Table 42 summarizes.

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Particularly striking is the decrease in new Secondary Instructional staff (427 fewer) and the offsetting growth in new Special Education staff (422 additional). Within the ranks of newly hired superintendents and principals, a pattern of expansion until 1976-77 occurred, followed by a steep one-year decline. Between 1976-77 and 1977-78, a loss of 46 new staff was apparent after a small but steady growth of new staff since 1973-74. The net decline of 34 FTE New Hires is reflected in those three administrative assignment areas in Table 42 (Superintendents, Elementary and Secondary Principals).

Table 43 depicts the changes over time in the proportion of New Hires to total staff by aggregated assignment area.

Relative stability has existed in the Kindergarten and Regular Elementary areas with approximately 9 percent and 7 percent new hired to total staff respectively. The proportion of new staff in Secondary Instructional has declined 1.7 percent, while that in Special Education has increased 1.3 percent. However, it is important to note that the proportion of new staff in Special Education has declined, albeit slowly, since 1975-76 when it peaked at 21.7 percent. Data indicates, therefore, that the Special Education "boom" in newly hired staff is beginning to level off.

The decline in new staff in virtually all assignment areas reflects the tight job market in education due to declining enrollments. When the trends of increasing age and experience levels of new staff are taken into consideration, the difficulty of recent college graduates in obtaining employment in Minnesota school districts becomes more evident. Data indicate that the trends discussed in this report show few signs of abating and contribute to what are the evolving characteristics of the education cadre in Minnesota: shrinking, experienced, well-trained, middle-aged, and increasingly subject to job loss due to staff reductions.

TABLE 42

CHANGE IN NEWLY HIRED FTE STAFF 1973-74 TO 1977-78

Assignment	Change In FTE New Hires	Percent Change
Kindergarten	- 13.1	-10.8%
Elementary	- 81.0	- 5.9%
Secondary Instructional	-427.1	-18.4%
Art/Music	- 44.7	-18.6%
English/Language/Speech	- 37.6	- 7.3%
Math/Science	- 67.9	-16.4%
Phy. Ed./Health	- 44.1	-20.1%
Social Studies	- 54.9	-22.4%
Vocational	-177.9	-25.7%
Special Education	+421.7	+70.8%
Supervisors, Directors, Coordinators	- 1.5	-17.6%
Other Administrators	+ 10.6	+31.2%
Superintendents	- 1.2	- 3.2%
Principals, Elementary	- 4.8	-12.2%
Principals, Secondary	- 28.4	-36.2%
Pupil Services	- 48.9	-21.5%
Other Professionals	- 96.6	-71.4%

TABLE 43

PROPORTION OF FTE NEW HIRES TO TOTAL STAFF 1973-74 AND 1977-78

	1973-74 Percent New Hires to Total Staff	1977-78 Percent New Hires to Total Staff	Percent Change
Kindergarten	9.1%	8.9%	-0.2%
Elementary (Regular)	7.0%	7.4%	+0.4%
Secondary Instructional	10.6%	8.9%	-1.7%
Special Education	19.9%	21.2%	+1.3%
Administrators, Directors, Pupil Services	6.7%	5.8%	- .9%

Chapter Footnotes

[1] The terms "New Hires" and "New Staff" will be used to connote newly hired professional staff.

[2] Personnel who are assigned to 19 or fewer one-hour periods per week are considered part-time for the purposes of this report.

VII. MAJOR FINDINGS ON THE GEOGRAPHIC MOBILITY OF MINNESOTA EDUCATORS

Fluctuating school enrollments in Minnesota create a corresponding change in demand for teachers in school districts. The movement of educators between districts reflects a response to shifts in supply and demand. Many jobs within public education are filled annually by the transfer of teachers who are already employed. In 1977-78, 26 percent of all newly hired public school staff in Minnesota (1,462 persons) were transfers from other districts in the state.

This study describes the characteristics, geographic preferences, and relocation patterns of public school educators who changed school districts within Minnesota between the 1976-77 and 1977-78 school years. Comparisons across the same dimensions are drawn between this migrant group and those educators who were not geographically mobile in the same time period. The study expands and revises an initial probe prepared for the Minnesota Advisory Council on Fluctuating School Enrollments[1] by testing a number of new variables and comparing a sample population of educators who were geographically mobile with a control population of non-mobile staff.

This report is based on results from survey questionnaires mailed to a sample population of educators with obtainable addresses who were reported by the Minnesota Department of Education as either: (1) terminated in one Minnesota school district in 1976-77 and hired in a different district for the 1977-78 school year (designated as "mobile"); or (2) employed in the same district for both the 1976-77 and 1977-78 school years (designated as "non-mobile").

Major questions addressed by the study include:

1. What were the characteristics of educators who changed school districts between 1976-77 and 1977-78? How do they differ from those educators who were not geographically mobile?
2. What were the relocation patterns of the mobile educators? Which geographic regions experienced net losses or gains?
3. What do educators report they would do if faced with job loss? Would they be more likely to migrate in order to remain in education or would they choose to change careers in order to avoid relocation?
4. Which geographic regions of the state are viewed as most desirable by Minnesota educators? What are the characteristics of preferred school districts?
5. What factors are predictive of geographic mobility for educators? Which variables are inhibiting?
6. What are some of the implications of these relocation preferences and patterns for the distribution of educational personnel in Minnesota school districts?

BACKGROUND

Mobility is an operational response by workers to the basic alternatives open to them and therefore reflects supply and demand in the marketplace. Study of place to place migration affords a look at migration flows between specific types of origins and destinations. This focus provides an opportunity to explore the relative strength of the "push" of unfavorable conditions in the place of origin as opposed to the "pull" of favorable conditions in the place of destination. However, many questions must be answered before policy makers and planners can know whether the existing volume of migration is excessive or insufficient, whether public policy intervention is appropriate, and what form any intervention should take.

Within education, factors that influence where teachers and administrators seek, accept, and remain in employment are of particular concern to policy makers. While demographic factors play an important role in determining who moves, a host of factors, both economic and non-economic, explain where educators move. Recent research by the State Planning Agency as summarized earlier in this report indicates that staff characteristics vary by district type. The possibilities of maintaining and improving educational quality are strongly influenced by the competence of the persons employed by school districts. In addition, personnel represent the basic manipulable input into the educational process. As concern for inequalities in the distribution of educational resources across school districts and student populations heightens with the pressures of fluctuating enrollments, staffing issues increase in importance.

This study draws on human capital investment theory, which postulates that individuals have within them a valuable economic resource ("human capital") that yields returns throughout their lifetimes. Larger investments, it is hypothesized, impede geographic movements by workers into other jobs. In short, there are sunken costs which act as barriers to mobility and tend to isolate one labor market from another. Because of human capital barriers to worker mobility, labor markets become segmented into highly structured internal units, within which worker movement is precisely defined. Similarly, the flow of educators between school districts is obstructed by their investments in human capital which are specific to a single local unit. Investments in human capital include formal education, vocational training, licensure, job experience, and seniority in a specific district.[2] Hence, workers' inclinations to change jobs depend on the anticipated costs and benefits of such moves.

This study sheds light on the capital investment theory and, on the whole, supports its assumptions. That is, geographically mobile educators tend to have less invested in the jobs they vacate than do non-mobile educators. Specifically, mobile educators are younger, have less seniority and job experience, and fewer community ties than do their non-mobile counterparts. These and related findings concerning the characteristics of mobile staff, movement patterns of migrant educators, and the relocation preferences of educators will be summarized in the sections which follow.

RESEARCH DESIGN

Subjects

Professional staff employed in Minnesota public school districts are assigned status codes according to guidelines established by the Teacher Licensing and Placement Division, Minnesota Department of Education. Coding is accomplished at the local district level and is included in an October 1 report to the Department.

The geographically mobile staff surveyed in this study comprised two groups: (1) Educators who voluntarily transferred from one district in the state to another between 1976-77 and 1977-78 (Termination Codes "marriage," "spouse transferred," "other education occupation," "personal reasons," "educator in another district,"; New Staff Code: any); and (2) Educators who were involuntarily terminated in one district due to staff reduction in 1976-77 and who were employed in a different district as of October 1, 1977 (Termination Code: "staff reduction"; New Staff Code: any).[3] A list of the entire population of voluntarily and involuntarily mobile educators, as defined above, was obtained from the State Department of Education which contained the addresses as well as the school districts of origin and destination for each educator.

For purposes of comparison, a control group of non-mobile educators was surveyed. An educator was defined as non-mobile if s/he was employed in a Minnesota school district as of October, 1976 and remained in that same district as of October, 1977, according to the State Department of Education. A 1 percent stratified random sample of this non-mobile population was taken. Stratification was performed according to: (1) the 13 state development regions; and (2) age, using the following three cohorts: 20-29 years; 30-44 years; 45+ years. After ascertaining the number of educators falling within each region/age stratum, a 1 percent random sample within each stratum was taken, with a minimum and maximum number of sample cases per cell set at 10 and 50 respectively.

The total number of cases in the three sample populations were:

Non-Mobile:	536
Voluntarily Mobile:	754
Involuntarily Mobile: (Staff Reduction)	129
TOTAL	1,419

Data Collection Instrument

Analysis is based on results from two sets of survey questionnaires mailed to all persons in the sample population. Of the total 1,419 questionnaires mailed out, 49 were returned as undeliverable; 830 questionnaires were returned completed. This represents a total return rate of 61 percent. Table 44 summarizes.

Assumptions

This particular study is not concerned with educators who leave their profession for other careers, nor with those persons entering public school employment for the first time or after a leave of absence. Rather, the population of mobile

TABLE 44

POPULATION AND SAMPLE NUMBERS

	Total Number Sample Population		Undeliverable Survey Returns		Base Number	Actual Number of Cases (n)
Non-Mobile	536	less (-)	7	=	529	339 Return Rate of 64%
"Voluntarily" Mobile	754	less (-)	14	=	740	437 Return Rate of 59%
Staff Reduction	129	less (-)	28	=	101	54 Return Rate of 53%
TOTALS	1,419	less (-)	49	=	1,370	830 Overall Return Rate of 60.7%

educators under present consideration includes only those persons hired in 1977-78 by a Minnesota school district from the existent pool of educators who were under contract in a different school district in 1976-77.

The primary focus of the study is on the district-to-district and regional mobility of Minnesota educators. The analysis treats the state as a closed system; therefore, educators either entering or leaving Minnesota public school employment are beyond the scope of this report. Further, each school district is assumed to be a relatively homogeneous internal market. The individual existence of these local policy making units is evidenced by defined economic and financial environments as well as by unique sets of operating policies with regard to pay, fringe benefits, and academic policies which inhibit the transferability of staff.

Although the primary focus of this study is on place to place migration, it is recognized that a change of employer for an individual educator is usually accompanied by an increase in salary. Thus, one of the concerns of the present analysis is the extent to which geographic relocation may reflect occupational mobility, thereby providing insight into the response of the education cadre to shifts in supply and demand.

PROFILE OF THE GEOGRAPHICALLY MOBILE EDUCATOR

Minnesota educators who changed school districts between the 1976-77 and 1977-78 school years can be distinguished from non-mobile staff on a number of demographic and education related variables. In brief, the mobile educator is considerably younger than the non-mobile educator, more likely to be a woman, and if married with an employed spouse, more likely to view her or his education wages as supplemental or equal to other family income. The geographically mobile educator has significantly fewer years invested in the community as measured by home ownership and length of residence, as well as fewer years invested in education as a profession and in the 1976-77 school district specifically. The data also show some upward career mobility for migrating respondents in terms of job level and assignment as well as movement into full-time positions. Additional information on commuting time, change of residence, and supplemental employment provides further insight into the migration decisions of mobile respondents.

On the whole, the findings support the tenents of the capital investment theory, as discussed in the preceding section.

Demographic Variables

Age

As expected, the mobile educator is on the average considerably younger than the typical non-mobile educator in the sample population. The average age of the voluntarily mobile educator in the population was 30.5 years, while the mean age of the involuntarily mobile educator laid off due to declining enrollments was 29 years. This compares with the average age of the non-mobile educator in the sample population of 39.3 years. These differences proved to be statistically significant (.0000 with 2 degrees of freedom between the groups). These findings corroborate the conclusions of other studies on teacher mobility which single out age as one of the most important factors relating to geographic movement.[4]

Sex

The total sample population of 830 educators was equally divided between men and women. Differences exist, however, between the sex distributions within each group. While men outnumber women in the non-mobile category, the reverse is true in the two groups of mobile staff. In fact, 63 percent of all female respondents were mobile, compared with 55 percent of all male respondents. As Table 45 depicts, the inclusion of involuntarily mobile staff boosts up the percentage of mobile female teachers.[5]

TABLE 45

SEX OF RESPONDENTS BY MOBILITY STATUS

		Mobile	
	Non-Mobile	Voluntarily Mobile	Staff Reduction
Female	45.7%	51.5%	70.4%
Male	54.3%	48.5%	29.6%
	100.0%	100.0%	100.0%

TABLE 46

MARITAL STATUS OF RESPONDENTS BY MOBILITY STATUS

		Mobile		
	Non-Mobile	Voluntarily Mobile	Staff Reduction	Total
Single	32.9%	58.7%	8.4%	100%
Married	41.9%	52.8%	5.4%	100%
Widowed	18.3%	0	6.7%	100%
Divorced	30.8%	46.2%	23.1%	100%

Marital Status

Data for the entire population indicates that 76 percent of all respondents were married; 19 percent were single; 2 percent were widowed; and 3 percent were divorced. Single and divorced status proved to be predictive of geographic mobility, while widowed and married educators were likely to be non-mobile. Table 46 summarizes.

It is important to keep in mind, however, that the marital status variable may be confounded by age factors. Moreover, given the high percentage of married respondents, it is important to examine the influence on mobility of the employment and wage earner status of the educator's spouse.

Wage Earner Status

Accordingly, married respondents in the sample population were asked whether their spouses were employed and, if employed, whether respondents viewed their education wages of primary, supplementary, or equal importance to the total family income.

Overall, 79 percent of married respondents indicated that their spouses were employed. There did not appear to be significant differences between mobile and non-mobile respondents on this variable. However, assuming that the employment opportunities for a spouse are considered in a relocation decision, less geographic movement could be anticipated in a two wage earner family. The increase in the number of employed husband-wife families can also be expected over time to inhibit the geographic mobility of the education labor force.[6]

Moreover, 37 percent of all married respondents viewed their education earnings to be of supplementary importance and 42 percent viewed them to be of equal importance to the wages earned by the spouse. However, due to the large number of missing observations on this variable, it is difficult to draw any conclusions about the significance of wage earner status on geographic mobility. The data indicate, however, that slightly more mobile than non-mobile educators view their education wages as supplemental or equal to those of their spouse. It is highly probable that interaction exists among the sex, age and marital status variables. It may be that young educators who view their education wages as equal or secondary to the spouse's income are "pulled" to a new education position in a different school district by the job opportunity of the other wage earner. Such respondents are likely to be women. If this is the case, the profile of geographically mobile educators contrasts sharply with educators choosing to leave education for other occupations, who tend to be male primary wage earners.[7]

Type and Length of Residence

Educators who did not relocate are firmly entrenched in their communities, as measured by length of residence. Respondents were asked to state how many years they had resided in their present dwelling (as of 1976-77). The mean length of residence in years for the non-mobile group proved to be 8.7, compared with 2.5 years for the voluntarily mobile group. This represents a statistically significant difference.

Seventy-six percent of all respondents reported that they owned their homes, while 23 percent rented and 1 percent lived with family or friends. The data indicate that a higher percentage of non-mobile educators are homeowners and that mobile educators are much more likely to rent or live with others. Again, these differences may reflect age differences between the two groups of educators.

Residential Change

It cannot be assumed that an educator who changes school districts also automatically changes her or his place of residence. Indeed, a majority of mobile respondents remained in the same county. In order to determine if a change in school districts was accompanied by a change of domicile, mobile respondents were asked if they moved to another county within three months of changing school districts. Of the 484 mobile teachers responding to this question, 60 percent indicated that they did not change their place of residence.

Education and Employment Variables

Total Years Employment and Years Invested in the 1976-77 School District

This study initially hypothesized that there would be an inverse relationship between geographic mobility and the number of years a respondent had invested in education in general and in the 1976-77 school district in particular. Findings support this assumption: educators with fewer years invested in public education employment (and with less tenure and fewer seniority rights) were more likely to be geographically mobile. Specifically, voluntarily mobile respondents had logged an average of 6.3 years of employment experience in public education, compared with 13.2 years for non-mobile persons. Further, the mobile group had an average of 3.0 years invested in their 1976-77 school district, while the non-mobile group reported a mean of 9.4 years.

Length of service, then, exerts powerful seniority effects on transfer in that long-term employees appear to have quite stable school affiliations. This influence is especially evident in metro area school districts experiencing enrollment decline. Such districts are increasingly left with a highly experienced and mature professional staff.

Total Number of Jobs

In an effort to ascertain whether previous occupational mobility and change is predictive of geographic mobility within the education occupation itself, respondents were asked to indicate the total number of jobs (both full and part-time) they had held since graduation from high school and to distinguish between those jobs that were in education-related fields and those outside of education. The data show no significant difference between the mobile and non-mobile groups on this variable. These findings contrast with those discussed earlier in this report in which educators voluntarily leaving education for non-education occupations were found to have a high degree of past occupational and job change experience.

Supplementary Employment

It was thought that the geographic movement of an educator might be influenced by the absence or presence of a second job, with the addition of a second occupation acting as an inhibitor to mobility. Therefore, respondents were asked if they supplemented their income by teaching in the summer, if they found it necessary to take a second job during the evening or on weekends, or whether they worked during the summer at a job other than teaching.

No significant differences were found between the two subgroups on these measures; therefore, results will be presented for the entire sample population. One-third (33 percent) of all respondents reported that they held a second, non-teaching job during the evenings or on weekends; 40 percent of all respondents reported non-education related summer work; 34 percent of the respondents reported that they held a teaching job in the summer. While these categories are not mutually exclusive (a respondent could work year-round in a second, non-teaching job), the data nevertheless corroborate the Bureau of Labor Statistics findings which report teachers to have the highest moonlighting rate of any occupational group.[8] In this context, it is interesting to note that 31 percent of the respondents indicated that the opportunity for supplemental employment would be an important consideration in deciding whether or not to accept a job in a different school district.

Educational Background

Respondents were asked where they received their undergraduate degree: the majority (80%) were prepared in Minnesota institutions while the remainder came primarily from the surrounding midwestern states of Iowa, North Dakota, South Dakota and Wisconsin. In addition, educators were asked about their area of residence before college: 79 percent resided in Minnesota and most of the remainder came from Iowa, North Dakota, South Dakota, Illinois and Wisconsin. Therefore, there is a distinct regional character to the Minnesota teaching cadre.

Respondents were also asked to indicate what degree they held beyond the Bachelor's. For the population as a whole, 68 percent had earned no advanced degree, 24 percent held a Master of Teaching or Master of Education, 7 percent a Master of Arts of Master of Science, and 1 percent a Ph.D.[9] No significant differences were found between the two groups on this variable, although slightly more mobile than non-mobile educators had M.A. or M.S. degrees. These data support other research in which the degree held was found to have only weak effects on teacher mobility. (Harnischfeger, *op.cit.)*

Professional Change and Job Search Behavior: Mobile Educators

Part-time/Full-time Employment Status

The data show that voluntarily mobile educators were more likely than non-mobile educators to be employed part-time by school districts during 1976-77; likewise, almost a fourth of the mobile educators who were terminated in 1976-77 due to staff reductions held part-time positions. The data for 1977-78 indicate that some of the voluntarily mobile educators in the sample managed to move into full-time positions as they changed districts, reflecting concomitant upward professional mobility.

TABLE 47

PART-/FULL-TIME EMPLOYMENT STATUS GROUP

	Non-Mobile	Mobile			
		Voluntarily Mobile		Staff Reduction	
	76-77	76-77	77-78	76-77	77-78
Part-Time	5.9%	12.4%	8.0%	22.2%	20.4%
Full-Time	94.1%	87.6%	92.0%	77.8%	79.6%
	100.0%	100.0%	100.0%	100.0%	100.0%

Job Level and Assignment

A number of voluntarily mobile elementary and secondary instructional staff moved into non-instructional areas, although they nonetheless constituted a minority. Within specific assignment groupings, the data reveal a net gain in the categories of Special Education, Supervisors, and Pupil Personnel accompanied by corresponding net losses in Elementary Instructional, and English/Speech/Drama. These findings reflect the continuing market demand for educators with specialized skills.

Job Search Behavior of Mobile Educators

Information gathered on the job search behavior of the two groups of geographically mobile educators reveals that respondents who voluntarily changed districts effected a transfer more easily than did those terminated through staff reductions. Specifically:

- Average Duration of Job Search: 1.5 months for those voluntarily mobile versus 2.4 months for those involuntarily mobile.
- Average Number of Jobs Applied For: 7.8 jobs for those voluntarily mobile versus 11.5 jobs for those involuntarily mobile.
- Average Number of Job Interviews: 2.3 for those voluntarily mobile versus 3.0 for those involuntarily mobile.

The data also shows that half of all mobile respondents expected to change school districts in the near future. Given this mobility propensity, a fairly high level of commitment to education as a profession could be expected. Accordingly, all respondents were asked if they viewed education as a permanent career. Answering in the affirmative were: 70 percent of voluntarily mobile respondents, 79 percent of non-mobile respondents, and a surprisingly persistant 80 percent of involuntarily mobile respondents.

Commuting Behavior and Preferences

How willing are Minnesota educators to commute to another school district? What is the actual commuting behavior of educators in the sample population? Does job change lessen commuting time? Respondents were asked to measure their actual commuting distances between place of residence and school in terms of travel time (minutes, one-way).

Voluntarily mobile educators reported a slight decrease in commuting time: an average of 15 minutes in 1976-77 and 14 minutes in 1977-78. Non-mobile educators spent an average of 13 minutes commuting to work. On the other hand, involuntarily mobile respondents commuted farther to their new job: an average of 13.7 minutes in 1976-77 compared with 21 minutes in 1977-78.

These same differences are reflected in respondents' willingness to commute, with non-mobile staff less flexible about lengthening their travel time to work. When asked how many minutes they would be willing to commute to work, non-mobile respondents reported a mean of 27 minutes, voluntarily mobile 30 minutes, and involuntarily mobile 37 minutes. Overall, the entire population indicated an average of 29 minutes of preferred commuting time.

Finally, respondents were asked if they resided and worked within the same school district boundaries. In the 1976-77 school year, significantly more non-mobile than mobile respondents lived and worked in the same school district (70 percent compared with 55 percent). This is consistent with the initial hypothesis that investment in community is a factor inhibiting mobility.

LOCATION PREFERENCES, INCENTIVES AND DISINCENTIVES TO MOBILITY, PERCEPTIONS OF DECLINING ENROLLMENTS

This section is presented as an exploratory probe into additional factors relating to geographic mobility. Its purpose is to provide descriptive information which suggests areas for further study.

Location Preferences

Regional Preferences

Certain areas of Minnesota are experiencing steeper declines in public school enrollments than other areas. One purpose of this study was to ascertain the relationship between projected school enrollment declines in a given region and the attractiveness of that geographic area to potentially mobile educators. Accordingly, respondents were asked:

> "If everything else were equal, but you could no longer have a position in your present school district, in which regions of the state would you be willing to work? Check all that you would accept, including your present region, if you wish."

The choices were defined to conform to the thirteen Minnesota Development Regions (see map in Appendix). The choices given and the percent of teachers who checked each one are shown in Table 48.

In general, the results indicate that teachers are more willing to move to those regions of the state that are both experiencing and are projected to undergo the least decline in population and school enrollments.[10] However, mobile respondents are more willing than non-mobile respondents to relocate to those regions experiencing growth (for example, Regions 7E, 7W and 11) and are less willing to move to regions experiencing decline (such as Region 8). This would suggest that mobile educators are attuned to state demographic trends and projections and possess an awareness of regional labor markets in Minnesota which is superior to that of non-mobile staff. This supports the idea that workers must be aware of alternative opportunities in destination markets before migration can occur.[11] In effect, there is a "cost of information" underlying mobility which, in turn, acts as a major impediment to migration.

Regional preferences expressed by respondents may also be viewed as reflecting the relocation patterns of mobile educators. Table 49 shows the percentage of 437 mobile teachers within each planning region in 1976-77 and the percentage of these same teachers within each region one year later. (It is important to keep in mind that the table shows only the regional shifts and net changes that occurred within the closed sample population of 830 respondents and does not indicate anything about overall growth or decline in the teaching cadre for each planning region.) It is instructive to note, however, that the mobile teachers' regional preferences (Table 48) closely reflect their actual relocation patterns (Table 49). For example, Region 7W shows a net gain of mobile respondents in the time frame studied; a large percentage of the same individuals checked this region as one to which they would be willing to migrate. In short, there appears to be a relationship between the mobile respondents' expressed relocation preferences and their actual relocation behavior. Finally, the data reveal a tendency on the

TABLE 48

REGIONAL PREFERENCES OF RESPONDENTS BY MOBILITY STATUS

Percent Checking "Willing"

Region	Non-Mobile Population	Mobile Population	Sample Total Percent
1	19	19	19
2	23	24	23
3	35	38	36
4	35	36	35
5	37	35	35
6W	24	22	22
6E	34	32	32
7W	49	56	52
7E	36	43	40
8	31	21	25
9	36	34	32
10	50	48	48
11	42	52	49

TABLE 49

GEOGRAPHIC MIGRATION PATTERNS OF MINNESOTA TEACHERS, COMPARISON OF MOBILE AND NON-MOBILE TEACHERS 1976-77 AND 1977-78, BY PLANNING REGION

	Non-Mobile Control Group (1976-77)		Mobile 1976-77		Mobile 1977-78		
Region	Number	Percent	Number	Percent	Number	Percent	Change
1	16	4.7	28	6.4	16	3.7	-
2	20	5.9	9	2.1	9	2.1	
3	33	9.7	21	4.8	24	5.5	+
4	19	5.6	30	6.9	37	8.5	+
5	16	4.7	28	6.4	35	8.0	+
6E	15	4.4	14	3.2	15	3.4	+
6W	20	5.9	21	4.8	8	1.8	-
7E	18	5.3	23	5.3	27	6.2	+
7W	25	7.4	33	7.6	39	8.9	+
8	17	5.0	35	8.0	21	4.8	-
9	24	7.1	41	9.4	44	10.1	+
10	41	12.1	58	13.3	47	10.8	-
11	75	22.1	96	22.0	115	26.3	+
TOTAL	339	100.0	437	100.0	347	100.0	

part of mobile educators to move to growing regions of the state, indicating that the market is operating to allocate educators to areas demanding their services.

School District Type

As another measure of location preferences, respondents in the sample were asked: (1) to describe their present position from a list of six possible teaching situations; (2) then, to choose one of the remaining five locales which would be most attractive if they were considering a change in location; and (3) finally, to choose one locale from the remaining four which would be the least attractive. Since differences between the mobile and non-mobile teachers were not statistically significant, Table 50 presents the percentages of all respondents checking each employment situation. Eighty-two percent of all respondents checked the suburban or medium city/town situations as the most attractive, with suburbs reflecting the widest disparity between present locale and preferred situation. On the other hand, 72 percent found inner city and 19 percent the small rural employment situations as the least attractive, resulting in virtual unanimity regarding negative feelings.

Respondents were also asked, if given the opportunity, whether they would change to their preferred locale if given a reasonable decrease in salary or would change only with a salary increase (assuming that all present teaching duties and fringe benefits remain the same and that they incurred no cost in making the move). Analysis revealed that 55 percent of respondents would change only with an increase in salary, while 37 percent would change if a horizontal salary move were possible. Among those educators who replied that it would take an increase in salary to induce them to change positions to their preferred locale, 62 percent reported that they would require between $1,000 and $3,999 in annual salary increase to make such a move. Sentiment about the least attractive locale was strong: 22 percent of all respondents replied that an annual salary increase of $10,000 would be essential as an inducement, while 36 percent retorted that "no amount of money at all" would entice them to move.

TABLE 50

TYPE OF LOCATION PREFERENCES: PERCENT OF RESPONDENTS GIVING EACH RATING: STATE TOTALS

Locale	Present Locale	Remaining 5 Attractive	Least Attractive
Inner City	2	1	72
Urban	4	10	4
Suburban	19	31	1
Medium City/ Town	63	53	3
Rural Small Town	12	5	19
TOTALS	100%	100%	100%

Mobility Incentives

Sixteen factors were presented to the educators, with the following instructions:

> "Suppose that your position were to be terminated in June, 1979. Suppose that there was no other education position available to you in your present district, and that you were considering whether to take a job in some particular other district in Minnesota. Rate the importance of your decision of each of the following factors, using this five point scale.
>
> It would not influence my decision at all 1
> It would have little importance to my decision .. 2
> It would be a significant factor in my decision ... 3
> It would be very important in my decision 4
> It would be important enough to decide the issue by itself 5
>
> (If the subject of the factor does not apply to you, use a zero.)"

Six of the factors were chosen to represent those matters which could be subject to influence by public policy through law, regulation or contract. Ten of the factors were chosen to represent matters that could not be influenced by public policy but which, nevertheless, have a bearing on a teacher's decision to move to another school district. The factors were presented to the respondents as a combined list, but are presented here in separate tables. (See Tables 51 and 52)

Policy Manipulable Factors

The six incentive factors which are amendable to public policy manipulation were rated by mobile and non-mobile educators as shown in Table 51. Roughly half of the non-mobile respondents rated salary, transfer and tenure factors as either very important or important enough to decide the issue of taking a new job by itself. On the other hand, mobile respondents were more likely to rank these factors as having less importance (*i.e.*, "no influence", "little importance", "significant") in their migration decision.

Background Factors (not directly manipulable)

The remaining ten factors, those that are not as easily subject to influence by public policy, were rated by the respondents as shown in Table 52. For purposes of this study, these factors are secondary to those discussed previously and can be regarded as background factors—an unmodifiable level of motivation that might remain regardless of public laws, regulations or local contracts. Several of the factors (*e.g.*, the school that the respondent's children would be able to attend, the opportunity for supplemental employment, and the nearness of relatives and friends) were rated inapplicable or having no influence by a large proportion of respondents, both mobile and non-mobile. The latter two factors also received a large percentage of ratings as "little importance."

Several factors did exceed 40 percent for all respondents in the two highest ratings: commuting distance in minutes and job opportunities/responsibilities of the spouse. However, mobile respondents were more likely to give a higher rating to the latter variable, reflecting the possibility of the mobile teacher following a spouse to another geographic locale. Likewise, differences between the two groups of educators appear on the importance of furthering education, the importance of recreational opportunities, and the nearness of relatives/friends, with higher ratings registered by mobile respondents.

Comparison of the Two Types of Incentive Factors

If the average percent of the most influential ratings given to the public policy factors (*i.e.*, "very important" and "important enough to decide the issue by itself") are derived, the mean percentage of high ratings yields 44 for the non-mobile teachers and 33 for the mobile teachers. If the same averaging is done with the background factors, the average percentages are 27 for the non-mobile teachers and 32 for the mobile teachers.

For the non-mobile teachers, then, public policy factors are rated higher than the background factors; for the mobile teachers, policy and background factors are given a nearly equal emphasis. This is probably due in part to the greater capital investments in public education employment made by non-mobile educators as discussed in the background section of this paper.

Paradoxically, current school district policies may encourage the retention of more experienced staff who exert a drain on fiscal resources, while younger, less expensive staff are enticed away by factors unrelated to professional contracts and management procedures. Policy variables seem to be more relevant to educators with proven commitments to their profession and their school districts than they are to younger educators who are influenced by non-policy factors in making career decisions.

However, differences between the two groups of respondents regarding the relative importance of policy-relevant and background factors may only be reflecting variations in age, sex, and wage-earner status. For example, non-mobile educators rated salary factors as important in changing jobs; these respondents are also likely to be older, male, and primary wage earners. Conversely, younger female

TABLE 51

PERCENT OF RESPONDENTS RATING POLICY MANIPULABLE JOB FACTORS, BY MOBILITY STATUS

Factor	Not Applicable		No Influence		Little Importance		Significant		Very Important		Deciding By Itself	
	Non-Mobile	Mobile	Non-Mobile	Mobile	Non-Mobile	Mobile	Non-Mobile	Mobile	Non-Mobile	Mobile	Non-Mobile	Mobile
Starting Salary	3	0	3	2	5	11	33	38	40	34	16	14
Salary Step	5	0	2	3	8	14	33	39	42	34	11	9
Transfer Retirement Credit	5	2	4	10	12	23	26	31	36	28 17	16	6
Vacation and Sick Leave	3	0	2	9	22	30	43	40	26	17	5	4
Work Weeks	4	0	7	10	31	37	34	34	20	17	5	2
Tenure Rights	4	1	5	11	13	23	29	32	34	25	14	7

TABLE 52

PERCENT OF RESPONDENTS RATING BACKGROUND FACTORS, BY MOBILITY STATUS

Factor	Not Applicable		No Influence		Little Importance		Significant		Very Important		Deciding By Itself	
	Non-Mobile	Mobile	Non-Mobile	Mobile	Non-Mobile	Mobile	Non-Mobile	Mobile	Non-Mobile	Mobile	Non-Mobile	Mobile
Distance in Miles	4	1	8	11	14	14	30	32	29	27	15	15
Spouse Jobs	17	11	15	13	15	11	14	15	16	23	23	27
Opportunity Supplemental Employment	11	5	36	33	26	30	17	20	8	9	2	3
Nearness of Relatives/ Friends	8	2	36	27	26	31	19	23	8	13	3	4
School for Children	22	18	17	15	7	8	22	21	25	28	7	9
Recreational Opportunity	7	1	15	12	28	27	33	33	16	24	2	3
Sell-Purchase House	11	13	13	18	16	13	23	21	23	22	14	12
Promotion Prospects	6	2	7	6	24	21	33	35	25	30	5	5
Co-workers	5	1	11	9	23	21	33	39	22	25	5	5
Opportunity Further Education	6	1	17	8	26	23	33	36	15	27	3	6

supplementary wage earners who are likely to be mobile placed more value on personal and family factors.

Inhibiting Factors to Mobility

The same 16 factors may be viewed as inhibitors to mobility if they are presented in terms of educators' investments in their present positions. Respondents were asked:

> "Now consider your present position in the light of the factors in the list above. Which three factors in that list do you value most in your present position? Enter in these blanks the numbers between 1 and 16 that precede the three factors most important to you in your present position."

The tally of responses to this question is given in Table 53. (Note that the inhibiting factors were presented in such a way that each factor had to compete with each other factor for attention.)

The final column in Table 53 can be interpreted as the percentage of respondents for whom this factor is among the three most important in their present positions. It then depicts inhibitors to mobility in terms of the human capital investments made by educators in their present school districts and communities. The factors mentioned among the four most important by at least one-fourth of all respondents were: starting salary, commuting distance, spouse's job responsibilities, and co-workers. However, commuting distance and spouse's job responsibilities were more important to mobile respondents, whereas salary was slightly more important to non-mobile respondents.

Major Employment Alternatives

Teachers facing a job cut have a number of alternatives including seeking another education position or leaving the field of education. In order to find out what Minnesota educators would do if terminated, respondents were asked:

> "Assume you could not have an educational position in your present school district after June, 1979. Starting with #1, please rank in order the things you think you would be most likely to do:
>
> —Try to get an education job with an immediately adjacent school district and commute.
>
> —Look for an education job elsewhere in Minnesota and move.

TABLE 53

THREE MOST IMPORTANT FACTORS IN CURRENT POSITION: PERCENT OF RESPONDENTS RATINGS, BY MOBILITY STATUS

	Like First		Like Second		Like Third		Total Percent	
Factor	Non-Mobile	Mobile	Non-Mobile	Mobile	Non-Mobile	Mobile	Non-Mobile	Mobile
Starting Salary	32	25	9	13	14	9	55	47
Salary Step	5	4	8	7	5	6	18	17
Transfer Retirement	4	1	5	2	5	3	14	5
Vacation/Sick Leave	2	1	5	2	5	5	12	8
Work Weeks	5	1	5	3	4	4	14	8
Tenure Rights	5	2	7	2	9	2	21	6
Distance in Minutes	5	11	14	14	10	9	29	34
Spouse Jobs	14	16	9	12	5	8	28	36
Opportunity for Supplemental Employment	1	2	2	3	3	2	6	7
Nearness of Friends	2	6	4	9	5	5	11	20
School for Children	5	5	7	7	7	7	19	19
Recreational Opportunities	2	2	4	5	6	10	12	17
Sell/Purchase House	4	4	5	4	6	6	15	14
Promotion Prospects	3	5	4	5	4	5	11	15
Co-Workers	9	11	10	8	6	13	25	32
Further Education Opportunities	1	5	3	5	5	9	9	19
TOTALS	405	528	407	525	407	528		

—Look for an education job outside of Minnesota and move.
—Remain in present community and take a job outside of education or retire.
—Remain in present community and take a "leave of absence" from education job.

Over half of the respondents reported that they would first commute to another school district if they could not continue in their present districts. This is understandable in that this alternative simultaneously satisfies both commitment to the education profession and to community. However, as Table 54 depicts, many respondents did not favor taking the next step of seeking an education job elsewhere in Minnesota (40% ranked it either fourth or fifth) or outside of Minnesota (59% ranked it fourth or fifth). The alternatives reflecting commitment to place over commitment to the education profession (numbers 4 and 5) receive a fairly even spread among the rankings 2, 3 and 4. These data indicate that there may be a turning point when, in face of a job cut, an educator's commitment to the profession tips in favor of a commitment to place.

Perceptions of Fluctuations in Enrollments

An educator's perceptions of fluctuations in enrollments in his or her school district seem to be related to mobility propensity. Hence, respondents were asked to estimate whether enrollments in their districts were increasing, remaining steady, or decreasing. As depicted in Tables 55 and 56, there are significant differences between the mobile and non-mobile teachers regarding perceptions of fluctuating enrollments.

Mobile educators are more likely to view enrollments as increasing or remaining steady in their school districts than are non-mobile staff who tend to view enrollments in their districts as declining. This relationship between an educator's perception of fluctuations in school enrollments and his or her mobility status is in turn related to the regional character of supply and demand. Although a net decline in school population of 22 percent has been projected for Minnesota between 1970 and 1985,[12] educators appear to view enrollment change from the perspective of their personal experiences at the local school district level. Those educators in this study who were hired in a different school district were thus more likely to perceive enrollments as remaining steady or increasing.

TABLE 54

RESPONSES TO ALTERNATIVES IN THE HYPOTHETICAL EVENT THAT EMPLOYMENT COULD NOT BE CONTINUED IN THE PRESENT SCHOOL DISTRICT

	Ranking Order (%)				
Major Alternatives	1	2	3	4	5
1. Go to Adjacent District/ Commute	54%	17%	119%	6%	4%
2. Look for Education Job Elsewhere in Minnesota	28%	19%	12%	35%	5%
3. Look for Education Job Outside of Minnesota	5%	16%	20%	14%	45%
4. Remain, Take Non-Education Job/Retire	17%	26%	24%	18%	15%
5. Remain, Take Leave of Absence	12%	22%	22%	20%	24%

TABLE 55

PERCEPTION OF ENROLLMENT CHANGE AT GRADE TAUGHT: BY MOBILITY STATUS OF RESPONDENT

		Mobile	
	Non-Mobile	**Voluntarily Mobile**	**Staff Reduction**
Increase	18%	30%	27%
Remain Steady	25%	33%	29%
Decrease	57%	37%	44%
	100%	100%	100%

TABLE 56

EXPECTED ENROLLMENT CHANGE FIVE YEARS HENCE: BY MOBILITY STATUS OF RESPONDENTS

		Mobile	
	Non-Mobile	**Voluntarily Mobile**	**Staff Reduction**
Increase	13%	27%	25%
Remain Steady	34%	29%	29%
Decrease	54%	44%	46%
	100%	100%	100%

SUMMARY COMMENTS

Several programs were created by the 1977 Minnesota Legislature to facilitate and encourage mobility in the teaching profession. The three programs include: Extended Leave of Absence, Early Retirement Incentive and Part-Time Teaching. In enacting the statutes, the intent of the Legislature was to inject more "mobility" (*i.e.*, turnover) in the education cadre and thus maintain a better balance between new and experienced educators. It was hoped that this would make for better morale, open up job vacancies, provide educators the opportunity to explore or enter a second occupation, bring new and innovative ideas to individual school systems, and at the same time result in dollar savings for districts and ultimately the State of Minnesota.

The geographic relocation of educators as a possible solution to excess supply over demand at the local school district and regional levels is not addressed per se in the Minnesota mobility legislation. Rather, its focus is on encouraging educators to exit the profession at least part-time. However, these Education Staff Studies indicate that there are complex interrelationships between geographic and occupational mobility. Indeed, data indicate that the legislation now on the books encourages the exits of men in their thirties who possess specialized knowledge and skills (*e.g.*, Math, Business, Science). This phenomenon in turn is accompanied by shortages in smaller school districts in those assignment areas. Further, as this study has indicated, staff who are likely to be geographically mobile predominate in smaller rural districts. Therefore, shortfalls in certain assignment areas and locations will tend to be exacerbated over time.

Economic incentives are frequently viewed as the most viable option for addressing geographic mismatches of supply and demand. However, the evidence presented in this study suggests that financial factors alone are not of primary importance to the migration decision. Rather, a broad range of demographic and community characteristics appear to have a strong impact on a determination to relocate. Indeed, salary factors were ranked most important by non-mobile staff. Policy makers have control over a limited number of these mobility incentive factors. Findings indicate that the "push" out of a school district tends to be based on the demographic characteristics of an individual, while the "pull" to a different district is strongly influenced by community and economic background factors. Further, this study suggests that educators hold firmly entrenched opinions of where they would be willing to work (location, school district type) and are unlikely to be enticed either to small rural or large urban districts by salary increases.

Local districts can alter the mobility propensity of staff most directly by attending to the distributions of age, length of service, level of professional education, and assignment. Further, the planning process initiated by legislation in 1977 (Minnesota Statutes 122.86-122.89, "Education Planning Task Forces") contains the rudiments of a regional strategy for intradistrict staff mobility. As local districts explore means for collaboration and cooperation, changes in staff employment will need to be addressed.

The complex interactions between current contract provisions and legislative initiatives, some of which have been highlighted here, could not have been anticipated by policy makers. However, these interrelationships will need to be addressed in order to arrive at the mix of instruments which will best ensure an optimal distribution of educators across school districts in Minnesota.

Chapter Footnotes

[1] Gordon Krantz, "Teacher Mobility Factors, 1976."

[2] For a more complete discussion specific to teachers, see David Greenberg and John McCall, Analysis of the Educational Personnel System, II: A Theory of Labor Mobility With Applications to the Teacher Market, Rand Corporation, August 1973.

[3] Note: It is assumed for purposes of this study that educators who change school districts will have terminated their contracts with the school district of origin. Possible exceptions will be those 16 teachers who participated in the one-year experimental "Teacher Exchange Program."

[4] A. Harnischfeger, Personal and Institutional Characteristics Affecting Teacher Mobility, Stanford University Center for Research and Development in Teaching, 1975.

[5] Note: The high proportion of women in the involuntarily mobile group is due primarily to the concentration to date of staff layoffs at the elementary school level.

[6] Steven Sandell, "Women and the Economics of Family Migration," The Review of Economics and Statistics, V. 59, N. 4, November 1977.

[7] See Minnesota State Planning Agency,"Public School Educators in Minnesota, Summary Report #3: Employment Status Changes of Educators Voluntarily Leaving Education or Terminated Due to Involuntary Staff Reduction, 1977," March 1979.

[8] See Diane Divorky, "Moonlighting: Occupational Hazard or Benefit?", Learning, Vol. 7, No. 3, November 1978.

[9] These categories do not include degree-equivalent credits beyond the Bachelor's (e.g., BA +45).

[10] According to data available in Faces of the Future, State Planning Agency, Office of State Demographer, January, 1977.

[11] Larry, D. Schroeder, "Interrelatedness of Occupational and Geographic Labor Mobility," Industrial and Labor Relations Review, No. 3, 1976.

[12] Minnesota State Planning Agency, The Condition of Education, 1977.

Appendices

APPENDIX A
DEFINITIONS AND CLASSIFICATIONS

PERSONNEL CHARACTERISTICS

Age

20-24	35-44
25-29	45-54
30-35	55 and over

Training

B.A. or less
Five Year Program
Master's Degree
Specialist Degree
Doctorate

Experience

0-10 years
11-19 years
20 or more years

Sex

Male
Female

PERSONNEL CLASSIFICATIONS

Assignment

Kindergarten Teaching
General Elementary Teaching (Grades 1-6)
Special Elementary (*e.g.*, Art, Music)
English/Speech/Foreign Language (Secondary)
Art/Music (Secondary)
Vocational — includes Home Economics, Industrial Arts, Business Education, Agricultural, etc. (Secondary)
Social Studies (Secondary)
Physical Education and Health (Secondary)
Special Education — includes all assignments at all levels, *e.g.*, speech correction, learning disabled, hearing impaired, emotionally disturbed, visually handicapped teachers; supervisors; directors
Pupil Personnel — includes counselors, psychologists, librarians, media generalists (all grade levels)
Supervisor, Director — includes subject area coordinators; curriculum and guidance supervisors (all levels)
Superintendent/Principal — includes assistants (all levels)
Other Administration — includes positions not requiring specific administrative license, *e.g.*, business managers, athletic directors, personnel directors
Other Professionals — includes interns, Right to Read, English as a Foreign Language, study hall supervisors

Assignment Groupings Used in this Report

F.T.E. Staff: Measures of staffing computed in terms of Full Time Equivalent (F.T.E.) personnel. A staff member spending 100 percent of his/her work week assigned to and providing professional services is counted as 1.00 F.T.E. Two half-time people would count as 1.00 F.T.E.

Total Professional Staff: Includes all professionally licensed administrators, classroom teachers, and other instructional personnel such as Special Education directors and teachers, counselors, librarians, and coordinators.

Administrators: Includes superintendents and elementary and secondary school principals and their assistants.

Total Instructional Staff: Includes professionally licensed classroom teachers in the following areas: Kindergarten; all Elementary; Secondary English/Language/Speech; Art/Music; Math/Science; Vocational; Social Studies; Physical Education/Health

Elementary Instructional: Includes all general and specialized elementary classroom teachers but not administrators or support personnel. Does not include kindergarten teachers.

Regular Elementary Instructional: Includes only non-specialized elementary classroom teachers in grades 1-6. Does not include elementary music, art, etc. personnel.

Secondary Instructional: Includes classroom teachers at the secondary level in: English/Language/Speech; Art/Music-Math/Science; Vocational; Social Studies; Physical Education/Health.

Special Education: Includes all professionally licensed teachers, directors and coordinators in Special Education.

Salaries

Salary data are based on F.T.E. service. Data include average salary and annualized salary.

Annualized Salary = [Average Salary ÷ Average Number of Weeks Worked] × 52 Weeks

Source of New Staff

Initial Employment — Minnesota Resident: Minnesota residents without prior job experience as public school educators.

Initial Employment — Non Minnesota Resident: Persons whose residence was outside Minnesota prior to employment and who have no previous job experience as public school educators.

Returned to Profession: Persons with prior job experience in education who were not employed in a school district the previous year. Does not include persons returning from leaves of absence.

Transfer from Another State: Persons who were employed the previous year as public school educators by school districts outside Minnesota.

Transfer from Inside Minnesota: Persons who were employed the previous year as public school educators by a Minnesota school district.

SCHOOL DISTRICT CHARACTERISTICS

Region —

The thirteen areas whose geographic boundaries coincide with those of the development regions defined in the Governor's Executive Orders #8 (9/1/71) and #59 (5/29/73). See map on page 67

Enrollment Size —

School districts whose fall enrollments (K-12) were:

0-299
300-799
800-1799
1800 and over

Cities of the First Class and Secondary Vocational/Special Education Cooperatives were treated as separate enrollment size groups.

(Note: Although 1973-74 was used as the base year, the position of school districts fitting the size classifications were not fixed. Therefore, the number of school districts in each classification varies from year to year.

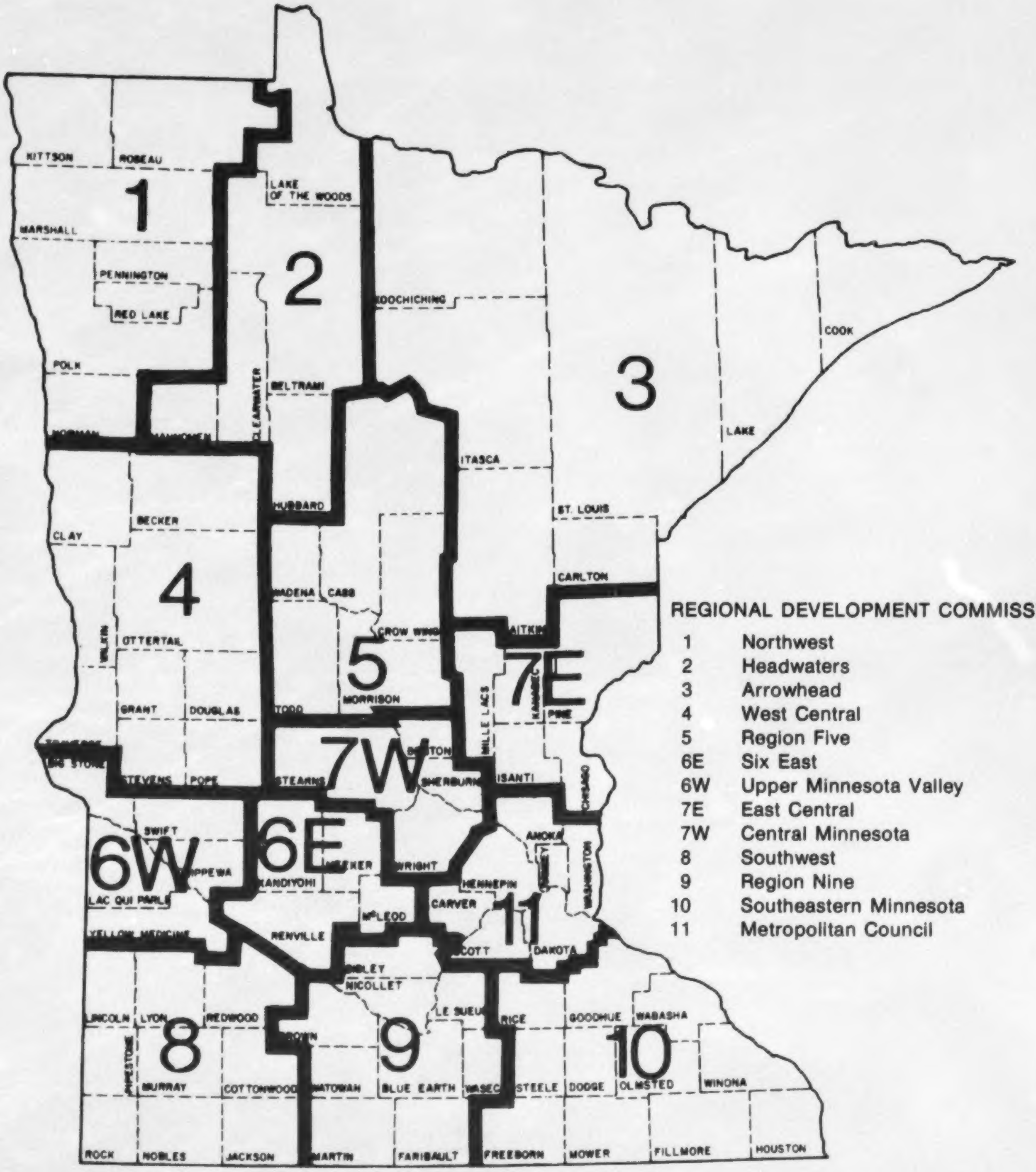
Enrollment Change —

Declining enrollment districts were separated into two groups: (1) those which lost equal or more than 10 percent enrollment between 1973-74 and 1977-78, and (2) those which lost between 6 percent and 9.99 percent.

Stable enrollment districts grew or declined between a plus or minus 5 percent.

Growth districts were grouped by: (1) those whose enrollment increased by equal or more than 10 percent in the five year period, and (2) those whose enrollment increased from 6 to 9.9 percent.

Minnesota Development Regions



KITTSON
ROSEAU
LAKE OF THE WOODS
1
MARSHALL
PENNINGTON
RED LAKE
2
KOOCHICHING
COOK
POLK
BELTRAMI
CLEARWATER
3
NORMAN
MAHNOMEN
LAKE
ITASCA
HUBBARD
ST. LOUIS
BECKER
CLAY
4
WADENA
CASS
CARLTON
AITKIN
CROW WING
WILKIN
OTTERTAIL
5
7E
GRANT
DOUGLAS
TODD
MORRISON
MILLE LACS
KANABEC
PINE
TRAVERSE
BIG STONE
7W
BENTON
STEVENS
POPE
STEARNS
SHERBURNE
ISANTI
CHISAGO
SWIFT
6E
ANOKA
RAMSEY
WASHINGTON
6W
CHIPPEWA
MEEKER
WRIGHT
KANDIYOHI
HENNEPIN
LAC QUI PARLE
McLEOD
CARVER
11
YELLOW MEDICINE
RENVILLE
SCOTT
DAKOTA
SIBLEY
NICOLLET
LINCOLN
LYON
REDWOOD
LE SUEUR
RICE
GOODHUE
WABASHA
BROWN
8
9
10
PIPESTONE
MURRAY
COTTONWOOD
WATONWAN
BLUE EARTH
WASECA
STEELE
DODGE
OLMSTED
WINONA
ROCK
NOBLES
JACKSON
MARTIN
FARIBAULT
FREEBORN
MOWER
FILLMORE
HOUSTON

REGIONAL DEVELOPMENT COMMISSION

1	Northwest
2	Headwaters
3	Arrowhead
4	West Central
5	Region Five
6E	Six East
6W	Upper Minnesota Valley
7E	East Central
7W	Central Minnesota
8	Southwest
9	Region Nine
10	Southeastern Minnesota
11	Metropolitan Council

APPENDIX B
TABLES

STAFF CHARACTERISTICS

TABLE 57

AGE OF TOTAL PROFESSIONAL STAFF IN THE METROPOLITAN AREA (REGION 11) AS COMPARED WITH THE BALANCE OF THE STATE (NON-METRO)

1973-74 AND 1977-78

Age Group & Year	Metro Area (Region 11) Number of FTE Staff	*Non-Metro State Totals Number of FTE Staff
Age 20-24		
1973-74	1,166.40	2,355.76
1977-78	434.49	1,251.78
Age 25-29		
1973-74	6,182.19	6,742.71
1977-78	3,604.28	5,903.05
Age 30-44		
1973-74	9,936.51	10,364.85
1977-78	11,949.00	12,562.91
Age 45-54		
1973-74	3,677.20	4,436.59
1977-78	4,552.95	4,997.54
Age 55 & over		
1973-74	1,962.97	3,915.61
1977-78	1,982.67	3,321.33
TOTAL		
1973-74	22,925.27	27,795.52
1977-78	22,523.39	28,116.61

*State Total, Eliminating Region 11

TABLE 58

TRAINING LEVELS OF TOTAL F.T.E. STAFF IN METROPOLITAN SCHOOL DISTRICTS

1973-74 AND 1977-78

	NUMBER F.T.E. STAFF		
Training	**Metro Area (Region 11)**	**First Class Cities**	***Non-Metro State Total**
B.A. or less			
1973-74	16,259.40	4,836.50	22,034.20
1977-78	14,907.70	3,860.90	21,737.04
5 Year			
1973-74	19.50	13.50	67.03
1977-78	24.30	15.50	87.09
Masters			
1973-74	6,238.61	2,182.10	5,525.07
1977-78	7,054.91	2,249.20	5,956.33
Specialist			
1973-74	195.50	61.10	85.51
1977-78	286.70	85.90	211.54
Doctorate			
1973-74	212.20	77.10	83.70
1977-78	249.80	86.40	124.61
TOTAL			
1973-74	22,925.30	7,170.30	27,795.43
1977-78	22,523.40	6,298.10	28,116.61

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*State Total, Eliminating Region 11 (Includes Duluth)

TABLE 59

EXPERIENCE LEVELS OF TOTAL F.T.E, STAFF IN SELECTED TYPES OF SCHOOL DISTRICTS

1973-74 AND 1977-78

Experience	**District Size 0-299**	**First Class Cities**	**State Totals**
0-10 Years			
1973-74	487.1	3,514.2	28,099.5
1977-78	982.7	2,378.3	23,838.4
11-19 Years			
1973-74	176.2	2,001.9	13,240.2
1977-78	316.1	2,277.9	16,222.6
Over 20 Years			
1973-74	164.7	1,654.1	9,113.6
1977-78	211.9	1,641.9	10,060.7
TOTAL			
1973-74	828.0	7,170.3	50,453.4
1977-78	1,510.7	6,298.1	50,121.7

TABLE 60

PROFESSIONAL STAFF: TERMINATION OF CONTRACT BY REASON (percent)

	73-74	74-75	75-76	76-77	77-78	Totals
INVOLUNTARY REASONS:						
Retirement	15.7	14.6	19.6	18.0	16.8	16.7
Death	1.6	1.5	1.3	1.6	1.5	1.5
Illness	1.3	.9	1.8	1.4	1.3	1.3
Spouse Transferred	10.3	8.8	7.3	8.1	6.4	8.3
Not Re-employed	7.3	5.7	11.4	8.2	5.7	7.5
Staff Reduction	*	.7	2.1	5.8	14.8	4.6
Subtotal: Involuntary	36.2	32.2	43.5	43.1	46.5	
VOLUNTARY REASONS:						
Marriage	4.6	3.3	4.9	3.2	2.6	3.7
Maternity	4.8	4.6	4.6	5.6	2.7	4.5
Return to Homemaking	10.1	9.8	10.8	11.4	11.2	10.6
Travel	.4	.3	.2	.4	.2	.3
Personal Reasons	4.3	6.9	7.3	8.7	7.1	6.8
Other Educational Occupation	2.3	2.8	2.9	2.3	2.3	2.5
Professional Growth	3.2	3.1	5.2	3.9	3.8	3.8
Military Service	.3	.2	.1	.1	0	.1
Left Educational Profession	12.0	13.6	13.6	14.6	18.5	14.4
Subtotal: Voluntary	42.0	44.6	49.6	50.2	48.4	
UNKNOWN REASONS:	21.8	23.2	6.9	6.7	5.1	13.4
TOTALS	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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*Staff Reduction Category created in 1974-75.

TABLE 61

SCHOOL DISTRICTS IN THE TWIN CITIES (REGION 11), DULUTH & ROCHESTER BY CATEGORY OF UNEMPLOYMENT INSURANCE PAYMENTS

JUNE — SEPTEMBER, 1977

Group 1: No Layoffs

- Belle Plain #716
- Burnsville, Eagan, Savage #191
- Eden Prairie #272
- Forest Lake #831
- Jordan #717
- Lakeville #194
- Minneapolis #1
- New Prague #721
- Orono #278
- Osseo #279
- Prior Lake #719
- Rosemount #196
- St. Francis #15
- Stillwater #834
- Waconia #110
- Westonka #277

Group 2: Layoffs and Rehires; No Unemployment Insurance

- Farmington #192
- Mahtomedi #832
- Minnetonka #276
- Norwood-Young America #108
- Randolph #195

Group 3: Layoffs and Rehires; Unemployment Insurance Only to Staff Not Reemployed

- Columbia Heights #13
- Fridley #14
- Golden Valley #275
- Inver Grove-Pine Bend #199
- North St. Paul-Maplewood #622
- Richfield #280
- Roseville #623
- Spring Lake Park #16
- Wayzata #284
- West St. Paul #197

Group 4: Layoffs and Rehires; Unemployment Insurance to Staff Reemployed as well as to Staff Not Reemployed

- Anoka-Hennepin #11
- Bloomington #271
- Brooklyn Center #286
- Centennial #12
- Chaska #112
- Duluth #709
- Edina #273
- Hastings #200
- Hopkins #274
- Mounds View #621
- Robbinsdale #281
- Rochester #535
- St. Anthony-New Brighton #282
- St. Louis Park #283
- St. Paul #625
- Shakopee #720
- South St. Paul #6
- South Washington #833
- Watertown-Mayer #111
- White Bear Lake #624

EMPLOYMENT STATUS CHANGES OF STAFF WHO VOLUNTARILY LEFT EDUCATION OR WERE INVOLUNTARILY TERMINATED DUE TO STAFF REDUCTION

TABLE 62

SEX OF RESPONDENTS BY REASON FOR LEAVING EDUCATION, 1977

	Male	Female	Total
Left Education	183 (70.4%)	77 (29.6%)	260
Staff Reduction	59 (27.4%)	156 (72.6%)	215

Chi Square = 85.12900 with 1 Degree of Freedom
Significance = .0000

TABLE 63

STATUS OF RESPONDENTS AS PRIMARY WAGE EARNER BY REASON FOR LEAVING EDUCATION

Primary Wage Earner	Left Education	Staff Reduction
Yes	211 (82.7%)	105 (49.5%)
No	44 (17.3%)	107 (50.5%)
	255	212

Chi Square = 56.86903 with 1 Degree of Freedom
Significance = .0000

TABLE 64

MARITAL STATUS OF RESPONDENTS BY REASON FOR LEAVING PROFESSION

Marital Status	Left Education	Staff Reduction
Single	58 (22.4%)	53 (24.9%)
Married	201 (77.6%)	160 75.1%)
	259	213

TABLE 65

AGE OF RESPONDENTS BY REASON FOR LEAVING EDUCATION

Age	Left Education		Staff Reduction	
20-24	12	(4.6%)	24	(11.2%)
25-29	93	(35.6%)	91	(42.3%)
30-34	79	(30.3%)	44	(20.5%)
35-44	52	(19.9%)	33	(15.3%)
45-54	16	(6.1%)	14	(6.5%)
55-59	3	(1.2%)	4	(1.8%)
60 & Over	3	(1.2%)	4	(1.8%)
No Answer	3	(1.2%)	1	(0.6%)
	261		215	

F = 1.3709

TABLE 66

LEVEL OF RESPONDENTS' HIGHEST DEGREE BY REASON FOR LEAVING PROFESSION

Education Level	Left Education		Staff Reduction	
BA	171	(68.7%)	164	(78.1%)
5 Year	19	(7.6%)	12	(5.7%)
MA	45	(18.1%)	27	(12.9%)
Specialist	9	(3.6%)	6	(2.8%)
Ph.D.	5	(2.0%)	1	(0.5%)
	249		210	

Chi Square = 6.22479 with 4 Degrees of Freedom
Significance = .1830

TABLE 67

EDUCATION JOB EXPERIENCE OF RESPONDENTS BY REASON FOR LEAVING PROFESSION

Number of Years	Left Education	Staff Reduction
Less Than One Year	10	5
1	107	46
2	67	56
3	29	39
4	24	29
5	10	19
6	3	6
7	4	7
8	1	2
9	0	2
10	0	1
11	0	1
12	1	1
More Than 12	1	0
No Response	4	1
	261	215

F = 19.3579 Significance = .0000

TABLE 68

LEVEL OF RESPONDENTS 1976-77 EDUCATION POSITION BY REASON FOR LEAVING PROFESSION

Job Level	Left Education		Staff Reduction	
Elementary	35	(14.8%)	89	(43.0%)
Secondary	183	(77.6%)	106	(51.2%)
Pupil Personnel	9	(3.8%)	9	(4.3%)
Administration	9	(3.8%)	3	(1.5%)
	236		207	

Chi Square = 45.32753 with 3 Degrees of Freedom
Significance = .0000

TABLE 69

EMPLOYMENT STATUS OF RESPONDENTS AS OF JULY, 1978

Employment Status	Left Education		Staff Reduction	
Full-Time	206	(79.8%)	115	(54.8%)
Part-Time	25	(9.7%)	56	(26.7%)
Total Employed	231	(89.5%)	171	(81.5%)
Not Yet Employed	5	(1.9%)	20	(9.5%)
Did Not Seek Employment	22	(8.6%)	19	(9.0%)
TOTAL	258		210	

Chi Square = 42.40421 with 3 Degrees of Freedom
Significance = .0000

TABLE 70

RESPONDENTS' CURRENT ANNUAL SALARY COMPARED WITH THAT OF 1976-77 EDUCATION POSITION BY REASON FOR LEAVING PROFESSION

Salary Comparison	Left Education		Staff Reduction	
Over $4501 Less	33	(14.5%)	36	(23.2%)
$3001 - $4500 Less	20	(8.8%)	10	(6.5%)
$1501 - $3000 Less	15	(6.6%)	22	(14.2%)
$501 - $1500 Less	11	(4.8%)	17	(11.0%)
Within $500 More or Less	32	(14.0%)	27	(11.0%)
$501 - $1500 More	16	(7.0%)	12	(7.7%)
$1501 - $3000 More	22	(9.6%)	10	(6.5%)
$3001 - $4500 More	17	(7.5%)	7	(4.5%)
Over $4500 More	62	(27.2%)	14	(9.0%)
TOTAL	228		155	

Chi Square = 33.34911 with 8 Degrees of Freedom
Significance = .0001

TABLE 71

RESPONDENTS' SATISFACTION WITH CURRENT OCCUPATION COMPARED WITH 1976-77 EDUCATION POSITION BY REASON FOR LEAVING PROFESSION

How Well Like New Job	Left Education		Staff Reduction	
Much Better	122	(54.0%)	37	(23.4%)
Somewhat Better	51	(22.6%)	29	(18.3%)
About Same	27	(11.9%)	30	(19.0%)
Somewhat Less	14	(6.2%)	30	(19.0%)
Much Less	12	(5.3%)	32	(20.3%)
TOTAL	226		158	

Chi Square = 56.28044 with 4 Degrees of Freedom
Significance = .0000

TABLE 72

COMMITMENT OF RESPONDENTS TO EDUCATION AS A PROFESSION, 1978

Willing to go Back To an Education Position	Left Education		Staff Reduction	
Yes	79	(34.1%)	89	(66.9%)
No	153	(65.9%)	44	(33.1%)
	232		133	

Chi Square = 35.44587 with 1 Degree of Freedom
Significance = .0000

TABLE 73

PROFESSIONAL STAFF: CURRENT OCCUPATIONAL TITLE BY REASON FOR LEAVING PROFESSION, 1977-78

Occupational Title	Left Education		Staff Reduction	
Professional/Technical (net)	62	(27.8%)	92	(60.9%)
Computer Programmer/Analyst	11		1	
Engineer (unsp)	1		3	
Health Technologist/Technician	4		1	
Teacher	14	(6.3%)	69	(45.7%)
Vocational/Educational Counselor	6		6	
Religious Worker (unsp)	3		-	
Research Worker (unsp)	3		2	
Other Professional/Technical Jobs	20		10	
Management/Administration (net)	43	(19.3%)	11	(7.3%)
Bank Officer/Financial Manager	3		3	
Inspector (not building/publ. admin.)	3		-	
Official/Administrator in Pub. Admin.	8		2	
Sales Manager/Dept. Health — Retail	5		-	
School Administration — Elem./Sec.	3		1	
Manager Administrator (unsp)	17		2	
Other Management/Admin. Jobs	4		3	
Sales (net)	57	(25.6%)	12	(7.9%)
Advertising Agents	3		-	
Insurance Agents/Broker/Underwriter	14		4	
Real Estate Agency/Broker	17		6	
Sales People/Clerks (unsp)	12		2	
Sales Rep.-Services/Construction	5		-	
Other Sales Jobs	6		-	
Clerical (net)	17	(7.6%)	22	(14.6%)
Library Attendant/Assistant	-		3	
Receptionist	1		3	
Secretary	6		10	
Other Misc. Clerical Jobs	10		6	
Craft/Trade (net)	15	(6.8%)	3	(2.0%)
Carpenter	6		-	
Other Misc. Craftsman Jobs	9		3	
Operative (net)	5	(2.2%)	1	(0.7%)
Misc. Operative Jobs	5		1	
Laborer (net)	7	(3.1%)	3	(2.0%)
Misc. Laborer Jobs	7		3	
Farm (net)	5	(2.2%)	1	(0.7%)
Farmer (owner)	3		1	
Misc. Farm Worker	2		-	
Service Work (net)	6	(2.7%)	4	(2.6%)
Waiter/Waitress	3		-	
Other Misc. Service Jobs	3		4	
Self-Employed (unsp)	6	(2.7%)	2	(1.3%)
TOTAL	223	(100.0%)	151	(100.0%)

CHARACTERISTICS OF NEW HIRES

TABLE 74

AGE OF FTE NEW HIRES IN REGION 11 AND THE BALANCE OF THE STATE

1973-74 AND 1977-78

	Age 20-24	25-29	30-34	35-44	45-54	55 & Over
Region 11						
1973-74	693.71	712.30	192.86	172.79	36.55	5.11
1977-78	315.40	763.29	310.94	250.73	73.68	14.88
Balance of State						
1973-74	1,429.99	962.96	345.05	280.68	103.67	32.71
1977-78	863.96	1,190.16	428.64	346.43	108.40	31.75

TABLE 75

AGE OF FTE NEW HIRES

1973-74 TO 1977-78

	20-24	Percent	25-29	Percent	30-34	Percent	35-44	Percent	45-54	Percent	55 & Over	Percent	Total
1973-74	2,123.70	(42.7%)	1,675.26	(33.7%)	537.91	(10.8%)	453.47	(9.1%)	140.22	(2.8%)	37.82	(.8%)	4,968.38
1974-75	1,966.53	(39.5%)	1,783.59	(35.8%)	548.74	(11.0%)	445.71	(9.0%)	193.26	(3.9%)	42.15	(.8%)	4,979.98
1975-76	1,616.52	(32.2%)	1,965.11	(39.1%)	614.38	(12.2%)	571.95	(11.4%)	203.80	(4.1%)	48.05	(1.0%)	5,019.81
1976-77	1,411.46	(28.7%)	1,917.51	(39.0%)	749.15	(15.2%)	591.14	(12.0%)	179.94	(3.7%)	64.65	(1.3%)	4,913.85
1977-78	1,179.36	(25.1%)	1,953.45	(41.6%)	739.58	(15.7%)	597.16	(12.7%)	182.03	(3.9%)	46.63	(1.0%)	4,698.21
Percent Change		-17.6%		+ 7.9%		+ 4.9%		+ 3.6%		+1.1%		+ .2%	